



*December 1993*

**HAPPY HOLIDAYS**



**FCC Highlights \* ARRL Report \* VE Exams Schedule \* Public Service Report  
DX Column \* Elmer's Corner \* Club Reports \* Want Ads \* Much More**

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**Auto-Call is the Official Journal of the Foundation For Amateur Radio, Inc.®**

**\$1.00**



## THE NEW GENERATION ROTATORS

### THEY'RE NOT YOUR FATHER'S HAM "M"

Rotator Comparison Chart

	The New Generation									Old Generation	
Model/Specs	Create RC5	Create RC5A	Create RC5B	Emoto 105TSX	Emoto 747SRX	Emoto 1105MSX	Emoto 1200FOX	Emoto 1300MSAX	Emoto 1800FSX	Telex HamIV	Telex T2X
Rotator Torque Ft/Lb	43	116	160	37	50	57	143	215	287	67	83
GD <sup>2</sup> Right Ant Inertia	N/A	N/A	N/A	100	400	700	1000	1800	3000	N/A	N/A
Bolt Static Torque Ft/Lb	506	1085	1450	215	502	717	1290	1792	2150	417	750
Wind Load in Tower (lb)	10	25	25	11	22	27	27	33	36	15	20
Mast mount	4	5	7	5	9	12	12	15	16	7.5	10
Rotating speed 360°	60-150 sec variable	60-150 sec variable	60-150 sec variable	55	35	65	40	77	80	60	50
Rev. Delay	None	2 sec	3 sec							None	None
Preset	Opt 3	Opt 3	yes	no	no	Opt	yes	yes	yes	no	no
Computer	no	no	no	no	yes	yes	yes	yes	yes	no	no
Power 120V 60Hz	80VA	140VA	200VA	70VA	70VA	70VA	90VA	120VA	150VA	26V AC	26V AC
Mast Dia	2-2.5 in	2-2.5 in	2-2.5 in	2-2.4 in	2-2.4 in	2-2.4 in	1.6-2.4 in	2.4-3.1 in	3.5-5.5 in	2 in	2 in
Control wire	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	8 cond	8 cond
Verbal	880	1540	1540	880	1100	880	1760	1760	2200	400	800
Mast load #											
Motor size	13	17	20	15	9	11	11	13	39.5	24	28
Brake type	worm drive	worm drive	worm drive	disk	friction	friction	friction	friction	friction	wedge	wedge
Self center mast clamp	yes	yes	yes	Adj	Adj	Adj	Adj	Adj	Adj	no	no
Special notes	3-6	3-6	3-6	6	1-6	6	2-6	6	6	4-7	4-7
Phong (5)	\$269.00	\$449.95	\$799.00	\$209.95	\$399.00	\$589.00	\$679.00	\$1099.00	\$3272.00	\$369.95	\$439.95
With Preset	\$379.00	\$528.95				\$663.00					

Notes:

\* Turns Tribander 470° in 35 seconds

4 T2X and HamIV have same motor and gear train parts

\* 120V nominal 220V special order

2 Variable speed 40 sec max

5 EEB price as of 5/91 subject to change

6 Wind Load in Sq. Feet

3 Variable speed w/SCR constant rotational torque at any speed

6 120/220 tapped transformer

### THE NEW GENERATION

An entire generation of amateurs have grown up knowing only one rotator manufacturer. Those old favorites are still popular. But, now a new generation of rotators are out to set high standards with innovative features such as: large machined steel gears, cast and machined aluminum cases, solid state controllers for smooth start/stop, preset, computer control and circular position indicators.

The bottom line is... strong, long term reliability, ease of operation and cost effectiveness. When you erect an antenna system the last thing you need is rotor problems!

### CREATIVE DESIGN ROTATORS

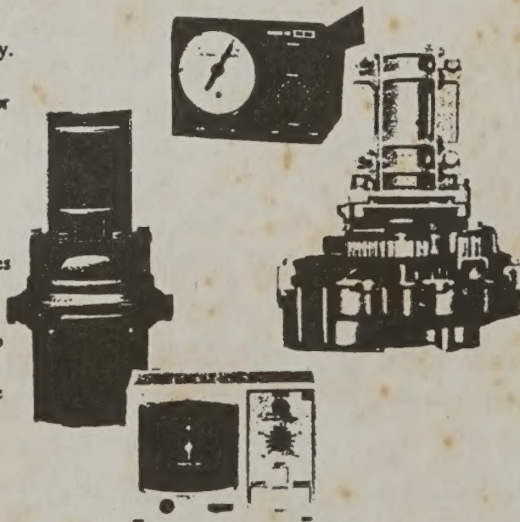
CREATE is serious about long term reliability. The CREATE RC5 series rotators were designed with the serious DX'er in mind. Three models for medium, large and ultra large antenna arrays are available.

### ROTOR FEATURES OF RC5 SERIES

- \* Large strong reduction gear system provides long term reliability during years of rugged operation.
- \* Worm drive gearing provides powerful braking force and low backlash to keep your antenna in position during severe weather conditions.
- \* Cast and machined aluminum case provide the strength required for long lasting service.
- \* Mast clamp guides for ease of mast installation.

### CONTROLLER FEATURES OF RC5 SERIES

- \* Speed control using silicon control rectifiers allows slow speed without reduction in rotation torque. Rotating spec is constant 60 to 200 seconds per 360 degrees.
- \* Reverse delay control (RDC). Delays reverse command to rotor until antenna is at rest. Prevents damage to rotor antenna and tower system.
- \* Circular dial indicator, for quick accurate reading of antenna direction. Great circle overlay available for USA (west-cent-east).
- \* Preset (on 3 models) a must for quick setting of antenna direction. Just turn the knob to the new heading, the rest is automatic. Won't waste your time holding down the brake lever and wait.



### EMOTO ROTATORS

More than 60% of all Japan amateurs use EMOTO rotators. Many unique innovations and international patents have made EMOTO number one.

EMOTO has a fool proof method to calculate which of their rotators will satisfy your needs. This GD<sup>2</sup> formula considers your antenna (s) weight, boom and longest element length. The EMOTO sheet is in metric so one must convert weight 2.2lbs= 1kg and length in meters 3.3ft=1 meter. Calculate your GD<sup>2</sup> then compare EMOTO GD<sup>2</sup> spec above.

$$GD^2 = W \times \frac{L^2 + B^2}{12}$$

Where: W: weight of antenna (kg)  
L: length of longest element (m)  
B: length of boom(m)

#### GD<sup>2</sup> EXAMPLES: Kgm<sup>2</sup>

TH7DX (437), TH3JR (63), 205BA (675), DISC7-3 (1300), A3S (61), A4S (173), KLM KT34XA (378), 3 ELE TRIBAND (150), 6 ELE TRIBAND (400), 20M 5 ELE (750), 15M 6 ELE (650), 40M 2 ELE SHORT BOOM (240), 40M 2 ELE FULL BOOM (800), 80M 2 ELE (1500), STACK ARRAYS 10M 5 ELE (60), 15M 5 ELE (200), 20M 5 ELE (750), 60+200+750=1010

EMOTO also has a robust AZ-EL rotator that has computer I/O ports. For those working satellites or EME moon bounce the EV700D5X should do the job, as rotating torque is more than double the YAESU G5400B AZ-EL.



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## MEMBER CLUBS

- Adams County Amateur Radio Society
- Alexandria Radio Club
- Amateur Radio Research and Development Corp.
- AMSAT - Radio Amateur Satellite Corporation
- Anne Arundel Radio Club
- Antietam Radio Association, Inc.
- ARINC Amateur Radio Club
- Arlington Amateur Radio Club
- Baltimore Amateur Radio Club
- Baltimore Radio Amateur Television Society
- Capital City Amateur Radio Society
- Capitol Hill Amateur Radio Society
- Carroll County Amateur Radio Club
- Central Maryland Amateur Radio Club
- Chaverim of the Greater Washington Area
- Columbia Amateur Radio Association
- Culpeper Amateur Radio Association
- D-MARC - Digital MidAtlantic Radio Council
- Department of State Amateur Radio Club
- Fauquier Amateur Radio Club
- Frederick Amateur Radio Club
- Frederick Amateur Repeater Group
- Friendship Amateur Radio Club
- Goddard Amateur Radio Club
- Green Mountain Repeater Association
- Herndon Repeater Group
- IBM Amateur Radio Club
- Johns Hopkins University APL ARC
- Laurel Amateur Radio Club
- Leisure World Amateur Radio Club
- MD/DC MARS (Navy Marine) Association
- MADRAS
- Maryland Emergency Phone Net
- Maryland FM Association
- Maryland Mobileers Amateur Radio Club
- Mercury Amateur Radio Assn., NE Area
- Metropolitan Communications Network
- Metrovision Amateur TV Club
- Mid-Atlantic DX & Repeater Assn.
- Montgomery Amateur Radio Club
- Montgomery Auxiliary Communications Service
- Moose Amateur Radio Club
- Mount Vernon Amateur Radio Club
- National Capitol DX Association
- Naval Research Laboratory Radio Club
- Northern Virginia FM Association
- Northern Virginia Radio Club
- Ole Virginia Hams Amateur Radio Club
- Opequon Radio Society
- Pentagon Amateur Radio Club
- Potomac Area VHF Society
- Potomac Valley Radio Club
- Prince George's Wireless Association, Inc.
- Prince George's County ARES/RACES
- Quarter Century Wireless Association, Inc.
  - Baltimore Chapter #20
  - Del-Mar-VA Chapter #150
  - Shenandoah Valley Chapter #137
  - Vic Clark Chapter #91
  - Washington Chapter #23
- Rock Creek Amateur Radio Association
- St. Mary's County Amateur Radio Association
- Shenandoah Valley Amateur Radio Club
- Southern Maryland Amateur Radio Club
- Southern Patuxent Amateur Radio Club
- Springfield Estates Elementary School ARC
- Stafford Amateur Radio Assn
- Sterling Park Amateur Radio Club
- Summit Amateur Radio Association
- Tri-County Amateur Radio Club
- T-MARC, Middle Atlantic Repeater Council
- Vienna Wireless Society
- Voice of America Amateur Radio Club
- Washington Adventist Amateur Radio Assn.
- Washington Area Young Ladies ARC
- Woodbridge Wireless, Inc.



AFFILIATED



# AUTO-CALL

## Official Journal of the Foundation for Amateur Radio

Foundation President ..... Tony Young, WA3YLO  
(301) 971-3905

Executive Vice President ..... Mary Morris, N4TCI  
(703) 971-3905

Admin. Vice President ..... Vickki Gigante-Huber, KA3PVS  
(301) 249-2609

Vice President ..... Robert Armstrong, WA4SQL  
(703) 751-2294

Vice President ..... Hugh Turnbull, W3ABC  
(301) 927-1797

Vice President ..... John Chitwood, K3RGB  
(301) 799-7360

Vice President ..... Chuck Sommer, N4OSD

Treasurer ..... Mildred Mumford, N3KGQ  
(301) 577-6659

Recording Secretary ..... Joe Seasey, KA3UZI  
(301) 725-5822

Corresponding Secretary ..... Ethel Smith, K4LMB  
(703) 536-8469

### AUTO-CALL MAGAZINE

#### STAFF

Editor ..... Doug Allen, N3FHM  
(410) 437-6258

Circulation Manager ..... John Swafford, W4HU  
(703) 536-9537

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## Columns

Coming events .....	5
All Point Bulletin .....	6
ARRL Report .....	8
PIO MD/Dc Section .....	12
DX DX DX .....	15
Elmer's Corner .....	17
FCC Highlights .....	19
BARC Programs .....	23
VEC Testing .....	25
Training .....	30

## Club Reports

SEESARC .....	31
Anne Arundel Radio Club .....	32
AMSAT .....	33
Montgomery ARC .....	33
Metrovision Amateur TV Club .....	35
Maryland Mobileers ARC .....	35
Ole VA Hams .....	36
T-MARC .....	37
Tri-County ARC .....	40
Woodbridge Wireless .....	41
Leisure World ARC .....	42
Mount Vernon ARC .....	42
MADRA .....	43
Culpeper ARA .....	44
Shenandoah Valley ARA .....	45
Rock Creek ARA .....	46
Green Mountain Repeater Assn. ....	46
Prince George's Wireless Assn. ....	47
IBM ARA .....	48
BARC .....	49
MD/DC Mars .....	50
Capitol City ARS .....	50
Northern VA FM Assoc. ....	51

## ADVERTISERS

Electronic Equipment Bank .....	2
Maryland Radio Center .....	11
Mugs & Stitches .....	14
The R.F. Connection .....	24
RAYMA Electronics .....	32
Capitol City Internet Service .....	34
Packet Gadgets .....	40
2-Land Communications .....	42
The Electronic One-Stop .....	44
G & G Electronics .....	52
Ham Radio Outlet .....	54



# COMING EVENTS

Jan 16	Richmond Frostfest
Jan 16	AMSAT Semi-Annual Meeting, Greenbelt, MD NASA/GODDARD Space Ctr.
Jan 19	B.A.R.C. Mini-Fest, Timonium, MD
Jan 23	Columbia Area Amateur Club Hamfest, Lancaster, PA
Jan 30	Maryland Moblieers ARC, Odenton, MD
Feb 20	Cumberland County Winter Hamfest, Camp Hill, PA
Feb 26	Appalacian Amateur Radio Club Group Hamfest, Lebannon, PA
Feb 27	Vienna Winterfest, Vienna, VA
Mar 12-13	Mecklenburg ARS, Charlotte, NC
Mar 13	York Springfest, York, PA
Mar 20	Two Rivers ARC, Monroeville, PA
Mar 26-27	Greater Baltimore Hamboree, Timonium, MD
Apr 3*	Chesapeake ARS, Virginia Beach, VA
Apr 4	Palm Sunday
Apr 11	Easter Sunday
Apr 11*	Penn-Del ARC Hamfest, New castle, DE
Apr 29-May 1	Dayton Hamvention, Dayton, OH
May 1*	Kent Island Hamfest, Grasonville, MD
May 8*	FAR/QCWA Annual Spring Banquet, Greenbelt, MD
May 8*	Roanoke Valley Hamfest, Vinton (Roanoke), VA
May 9*	Mother's Day
May 8-9*	Greenville, NC Hamfest
May 15	Warminister ARC, Wrightstown, PA
May 15	Armed Forced Day
May 20-22	Atlantic Div./N.Y. State Convention, Rochester, NY
May 22	Great Hagerstown, MD Hamfest
May 29	Maryland Fm Assoc. Hamfest, Howard Co. Fairgrounds, Howard Co., MD

*Thanks to Hugh Turnbull - W3ABC and Bob Milligan - KI4MB for providing much of the above information. Please send a copy of your Hamfest Flyer and Information to Auto-Call and keep us advised of any changes. We are anxious to provide our readers with timely information and help to avoid possible conflicts when scheduling activities.*

**WE NEED ALL TH WE CAN GET!**



## ALL POINTS BULLETIN..... WANTED!

This is an appeal to our readers to check the list of clubs below and see if your club is listed. If so, please be sure that your executive board is aware that we need to hear from your club. We have not received a club update form, which advises us of new officers AND the two currently assigned trustees to FAR. It is possible that we have made an error in our record keeping, but since 1993 is almost gone, we wouldn't mind an update from all member clubs. To make that easy, we have reproduced the update form on page 7 of this AUTO-CALL.

Club leadership changes often leave voids in continuity regarding annual affiliation updates (including ARRL), insurance and post office box renewals. There is a nifty book offered by ARRL called the CLUB PRESIDENT'S WORKBOOK that devotes two pages to "transition check-offs".

Here are the clubs we NEED to hear from:

Arlington ARC  
Baltimore ARC  
BRATS  
Capitol City ARC  
Chaverim  
Culpepper ARC  
DOS ARC  
Frederick ARC  
Green Mtn.Rptr Assoc.  
John Hopkins APL ARC  
MD. Emer. Phone Net.

Maryland FM Assoc.  
Nat. Capitol DX Assoc.  
Northern Va RC  
Pentagon ARC  
Potomac Area VHF Soc.  
QCWA (Chapters 137 & 91)  
St. Mary's County ARA  
So. Patuxent ARC  
Sterling Park ARC  
Vienna Wireless Society  
Woodbridge Wireless Inc.

The completed forms can be sent to the AUTO-CALL address on the back of any issue or directly to me at 12016 Long Ridge Lane, Bowie MD, 20715.

On another subject..... Have you noticed how many "ham" tags appear on cars lately- It always pleases me to see them, and I often look them up when I get home, if I don't already know them. our hobby is, (and should be), a source of pride. Here is my point. Driving can be an aggravating experience, and we sometimes become impatient at situations and other drivers. Your license plates should be your "badge" and your driving attitude should reflect well on you and the amateur radio community.

Tony, WA3YLO

**ANNUAL JOINT HOLIDAY LUNCHEON  
SOWP CHAPTER X AND QCWA CHAPTERS 23 & 91  
SATURDAY DECEMBER 11TH  
RAMADA HOTEL, TYSONS CORNER, VA  
(SE corner, junction of Beltway and Route 7)**

Pre-lunch get-together 12 noon  
Menu: chicken      Price \$18.00 per person  
Reservations: call Jim Wilcox, (703) 560-0757 by Dec. 6  
Come and celebrate the Holiday Season with us





## ANNUAL UPDATE NOTIFICATION

Please return a completed copy of this Notification to the Foundation Secretary to update the records of your organization's officers, trustees and other personnel.

Name of organization \_\_\_\_\_

Mailing Address \_\_\_\_\_

Geographical Area Covered \_\_\_\_\_

Meetings \_\_\_\_\_  
(Day - Time - Place)

Number of Members \_\_\_\_\_

On-The Air Meetings: \_\_\_\_\_ Club Call \_\_\_\_\_  
(Day - Time - Frequency)

Information Contact: \_\_\_\_\_ Phone \_\_\_\_\_  
(Name - Call)

Training Class Contact: \_\_\_\_\_ Phone \_\_\_\_\_  
(Name - Call)

Officers:	Call	Name	Phone	Date Elected
President:	_____	_____	_____	_____
Vice Pres:	_____	_____	_____	_____
Secretary:	_____	_____	_____	_____
Treasurer:	_____	_____	_____	_____
Other:	_____	_____	_____	_____

Representatives to FAR 1/ \_\_\_\_\_  
\_\_\_\_\_  
2/ \_\_\_\_\_

Retiring Trustees: \_\_\_\_\_

Trustees are expected to make themselves familiar with the Constitution and By-Laws of the Foundation For Amateur Radio and shall keep themselves informed of FAR activities. They shall report regularly to the membership of their organization and shall keep themselves informed as to the needs and desires of the true interests of that organization and of the Foundation.

Failure of a member organization to be represented by its Trustees at least once every twelve months shall be construed as evidence of lack of interest on the part of the club to continue its membership and thereafter it will be carried as an inactive club and dropped from the mailing and publication lists of the Foundation.

Submittee by: \_\_\_\_\_  
(Signature) (Office)

Date \_\_\_\_\_



**American Radio Relay League Report**  
by John Swafford, W4HU

**Nobel Prize: Ham, former ham share 1993 award in physics.**

by Stephen Karpf, WJ2P

The 1993 Nobel Prize in physics has been awarded to Joseph H. Taylor, K1JT, and Russell Hulse, formerly WB2LAV. Their 20-year effort in radioastronomy began in 1974 at the Arecibo National Observatory in Puerto Rico.

Drs. Taylor and Hulse will share the Nobel Prize award of \$845,000. Their 1974 discovery of a binary pulsar and resulting study over the next two decades confirmed experimentally Albert Einstein's general theory of relativity.

Taylor told his local newspaper, the Star Ledger, that he "attributes his love for science to an amateur radio hobby he developed as a high school student at Moorestown Friendship Academy in Moorestown. He is still dabbling (the Star Ledger said) in gadgets, often designing instruments for use on radio telescopes."

In 1974 Taylor, then 33, taught at the University of Massachusetts in Amherst; Hulse was a graduate student working on a doctorate under Taylor. Since Massachusetts-Puerto Rico telephone service was unreliable at the time, a link using ham gear and a phone patch kept Joe and Russell in touch.

Joe Taylor, 52, has been a ham since 1954, when he was 13. Joe (then K2ITP) and his older brother Hal, (then K2ITQ, now K2PT), got their novice tickets at the same time. Joe and Hal made quick progress as novices, building a crystal controlled 2-meter AM transmitter with a 5763 in the final. They soon moved on to Technician class and put together a 500 watt 4-250 6-meter rig powered by a pole transformer and mercury vapor rectifiers tied to a 6-over-6 element array.

Joe and Hal earned money for ham gear by working on their grandfather's farm overlooking the Delaware River in New Jersey. The farm's main product was tomatoes for the Campbell Soup Company. This farm has been in their family since 1720.

April 1958 QST featured Joe and Hal setting a record in the ARRL January VHF Sweepstakes. Their parents worried that the boys spent too much time with ham radio, but those same parents drove the two to hamfests when Joe and Hal were too young to drive themselves.

Nobel co-winner Russell Hulse, 42, got his Technician license in the late 1960s. He enjoyed building the kits of the day from Eico, Heath and Knight. School and other activities kept him from studying code enough to progress to higher license classes, he said. He later let his amateur ticket lapse but is once again interested, he said.

As a youth Hulse also built radio telescopes based on material about electronics, Yagis, and corner reflectors drawn from The ARRL Handbook and antenna texts. This background was invaluable for working the Arecibo radiotelescope, he said.

Russell Hulse got his bachelor's degree at Cooper Union, then became Joe Taylor's doctoral student at the University of Massachusetts at Amherst.

Joe Taylor attributes his bent for science to his experience with ham radio during his high school years. The Taylor brothers worked aurora and scatter on 6 and 2 meters during the peak sunspot years of 1957 and 1958, taking part in the ARRL International Geophysical Year Research Project. They received a prized Soviet QSL card for tracking Sputnik in October 1957. QST for December, 1958, published an article by Joe Taylor on ionospheric scatter on 6 meters. The author was 17 years old.

When Hal Taylor went off to Haverford College he and Joe set up a 6-meter-to-220 MHz crossband duplex link to stay in touch. Years later the Taylors linked up by ham radio when Joe went on sabbatical to Australia.

*Continued on next page*



Joe holds a B.A. in physics from Haverford and then a PhD from Harvard in astronomy. Hal went on to a PhD, too, and now teaches physics at Richard Stockton College in New Jersey.

There is a learned tradition in the Taylor family. Joe's and Hal's father was a school teacher and principal; a relative also names Joe Taylor founded Bryn Mawr College. Still another relative was the first president of Haverford College.

Joe Taylor and Russell Hulse discovered the binary pulsar in 1974 as part of an extensive, specially designed search for pulsars using the 300-meter dish at Arecibo. The two realized that this binary pulsar could provide an excellent opportunity to test Einstein's theory (a process that continues to the present, as new technologies continue to provide opportunities to verify the theory).

Taylor and Hulse published their Arecibo work in 1975 in the *Astrophysical Journal Letter*. Hulse actually discovered the binary pulsar system, but gives most of the credit to his mentor Taylor, who for the past 19 years has made the measurements and calculations resulting from the system necessary for proving the theory.

In short, the rate at which the Taylor-Hulse pulsars are spiraling toward each other agrees with the rate predicted by Einstein's theory to within half a percent.

Joe Taylor today is Princeton University's James S. McDonnell Distinguished University Professor of Physics with an endowed chair, the highest teaching title bestowed by the university.

Russell Hulse's rank of principal research physicist at the Princeton Plasma Physics laboratory is the highest research title by the Laboratory.

Joe Taylor won the Wolf Prize, one of the most prestigious honors in physics, in January 1992. The Wolf Prize carries a \$100,000 award, which he gave to the Princeton Physics Department for graduate fellowships.

Taylor also received a MacArthur "genius" award in 1981 and the Dannie Heineman Prize of the American Astronomical Society and American Institute of Physics in 1980.

Ed: Steve Karpf is a writer of television and movie scripts and documentaries and lives in Montclair, New Jersey with his wife Patricia Karpf and 4-year old daughter Katie. He's on all bands 3.5-440 MHz and especially likes HF DX.

### **ARRL Washington Coordinator Announces April Retirement.**

ARRL Washington Area Coordinator Perry Williams, W1UED, has announced that he will retire in April 1994 after 40 years of service for the League. He is currently the staff member with the longest tenure at Headquarters.

Perry, just turned 65, began his ARRL career in 1954 in the former Secretarial Department, subsequently the Membership Services Department, when the ARRL Headquarters building was located in West Hartford, Connecticut. He became Washington Area Coordinator in 1980.

### **Shuttle Hams Garner National Press Coverage.**

The hams aboard the Space Shuttle got a nice mention in an Associated Press story that went out Friday evening October 22. In a story led with the astronauts' practice landings using the shuttle's on-board computer, the AP noted that some of their very limited free time was being used to talk to schools via ham radio.

"Because of the length of the mission (the AP said) and the number and intensity of medical tests, NASA scheduled two half-days off for the seven astronauts: Friday and next Thursday.

"The astronauts squeezed in several ham radio contacts with U.S. schools as they orbited 178 miles high.

*Continued on next page*



"It's fantastic, and especially talking to young people," flight engineer Bill McArthur, KC5ACR, told the AP. "When we do that, it makes us just really proud to be up here representing all the people of the United States. To be quite honest with you, it brings tears to my eyes."

As of Saturday, October 23, four days into the 13-day mission, the hams aboard STS-58 had made nearly 300 general QSO packet connects and several random voice contacts in the U.S. and abroad, according to Frank H. Bauer, KA3HDO, of the SAREX Working Group.

Bauer said that in most cases, full-quieting radio links were established early in the pass and the school question and answer sessions continued until the scheduled loss of signal. On October 21, the Lycee Gaston Febus school in Pau, France had a telebridge contact with the astronauts, with Jean-Marc Dumont, the France school coordinator, saying that over 10,000 students throughout France listened to the contact through a national repeater link, according to Bauer.

Because this shuttle has been particularly successful in hooking up with schools on schedule, times allotted for backup schedules have become available for general contact with amateurs.

## BRIEFS:

- o An advertisement for ICOM America in November QST concerning a Christmas promotion by ICOM could be interpreted to mean that ARRL memberships are being discounted through an ICOM coupon program. An ICOM press release on the promotion also mentions ARRL membership as a "discounted product."

Actually, that's not the case. What the coupon promotes is the standard new membership "extra" already offered by the League: a free ARRL book to new members.

- o The Amateur Radio News Service is once again soliciting club newsletters for its annual competition. The contest, open to all Amateur Radio organizations (except general circulation magazines and professional journals), aims to recognize "superior performance in Amateur Radio journalism." Editors who submit one copy of any issue of their newsletter dated July 1992 through December 1993 will not only be entered in the competition but will receive a rating from the ARNS judges.

Early submissions are encouraged; for more information on the ARNS and to enter the contest, contact ARNS President Lee Knirko, W9MOL, 11 S. LaSalle St., Suite 2100, Chicago IL 60603.

- o Upcoming ARRL meetings: Executive Committee, October 30; Long Range Planning, November 6; Administration and Finance, November 13; Volunteer Resources and Membership Services, November 13; and ballot counting for Board of Directors elections, November 19.

- o The Radio Amateurs of Canada report "spectacular growth" in the amateur population north of the border. On October 1 there were 41,014 VE hams, 15,787 of them new since the introduction of a restructured Canadian amateur service in April 1990. The RAC also reports that nearly 72 percent of those 41,000 amateurs have obtained "the highest level of qualification."

Even more encouraging to the RAC was the drop in the average age of amateur licensees: in 1987 60 percent were over 50, while in 1993 that percentage had fallen to 54.

Former W1AW station manager Chuck Bender, W1WPR, who retired in 1992, is recovering from heart by-pass surgery and doing just fine, according to his successor, Jeff Bauer, WA1MBK. Countless former Novices from the 1950s through the 1980s have valued QSLs from W1AW signed "CR"; Chuck for years would stay after the night shift and give newcomers the thrill of a W1AW contact.

Incidentally, Chuck's former boss George Hart, W1NJM (who also began his ARRL career as a W1AW graveyard shift operator in the late 1930s) had by-pass work a couple of years ago and looks great. He's been in to the HQ building several times recently to use the reference library for a historical article he's writing.



# MARYLAND RADIO CENTER

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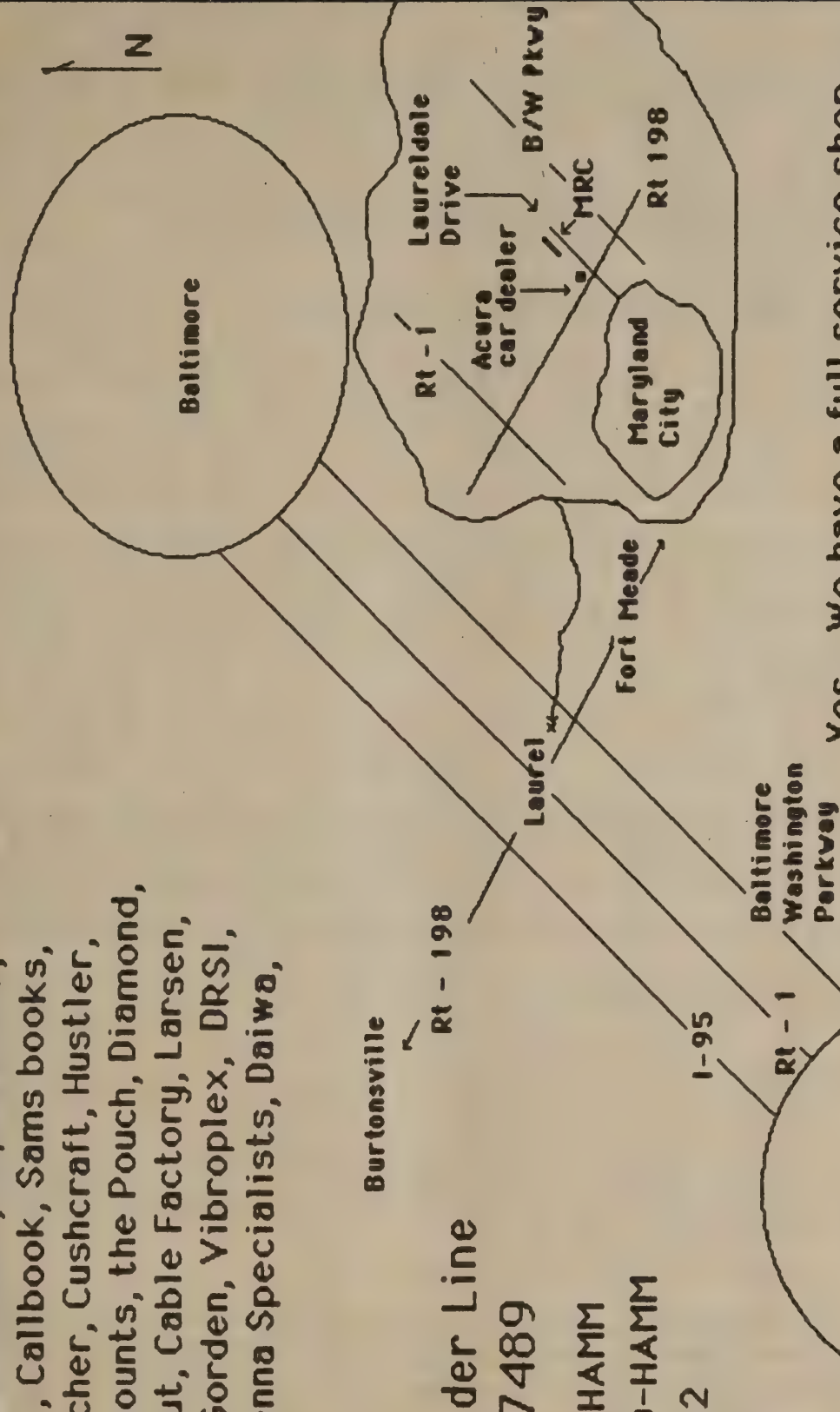
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## **PUBLIC INFORMATION COORDINATOR MARYLAND/DC SECTION**

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Glen Burnie, MD 21060-7616**

**Voice: (410) 760-9426**

**Packet: N3EKZ @ WB3V.MD.USA.NOAM**

### **PUBLIC INFORMATION OFFICER APPOINTMENTS**

The Southern Patuxent Amateur Radio Club (SPARC) designated their current Secretary, Walter C. Stone III, KA3ZZK to fill their open position and the United States Naval Academy Amateur Radio Club selected Victor Vasily Chistiakov N2TYC, a communications enthusiast who enjoys writing both technical and non-technical articles to share his passion of the hobby with others. The Moose Amateur Radio Club (MARC) has nominated Bernie Ostrofsky, W9IQ, who according to Tom, KE3GK, has been a ham forever and should make an excellent choice for them. We extend a hearty welcome to these individuals to the growing list of Field Organization Station Appointments.

### **SPECIAL EVENT STATION**

The St. Mary's County (MD) Amateur Radio Association had a great time operating a special event station from the Annual Oyster Festival at the St. Mary's County Fairgrounds, a two day affair covering Saturday and Sunday October 16th and 17th. Modes used were HF voice, VHF voice and packet, and an HF/VHF multimode station that included an Automatic Packet Reporting System (APRS) station. Antennas used were an R-7 vertical (which was HOT!) and a B&W Multi Band folded dipole, plus a couple of VHF antennas. A special AA4RE portable BBS was in operation from the festival providing NTS packet message service to the general public. Due to a contest going on, a number of stations on RTTY were worked as well as the Boy Scout Jamboree On The Air (JOTA) stations that were operating, providing lots of contacts.

One of the highlights of the festival, in addition to lots of good seafood, was the annual National oyster Shucking Championship. The winner of this competition received an expense paid trip to Galway, Ireland for the international competition.

Tom W4OKW, left early to attend the Cirque Du Soleil, a fantastic Canadian circus that was performing at Tyson's Corner and sat a couple of rows away from President Bill Clinton and family, along with a "platoon" of Secret Service agents. According to Tom, all of the agents must have been "hard of hearing" because they all had earphones in one ear!

### **YOUNGSTERS SAFE AT FINZEL**

On October 19th, Gay Rembold, W3DFW received a call from the Allegany County Civil Defense office to take the mobile command center, AMCOMM 1, to provide a command post for the Maryland State Police, Department of Natural Resources, Western Maryland Specialized Search Team, and approximately 90 volunteers to search for two missing girls from the Salem Youth Home

*Continued on next page*



on Lower New Germany Road, Finzel, MD. The girls were located safe at approximately 1 p.m. on Tuesday in the Meadow Mountain Run area, not far from the facility, after being missing since late Monday afternoon when a ten-person search team encountered the girls in the area of East Shale Road, approximately one mile south of Interstate 68. Eight year old Lisa Marie Whitaker and nine year old Amy Lynn Fitzgerald were taken to Sacred Heart Hospital for a precautionary medical examination since the Monday night temperatures dipped into the lower 40s in the 55,000 acre state forest. Other Amateur volunteers who were with Gay for this event were Robert Mynhier, WB3AXV and Ron Beeman, N8YIB. Ronnie Barb, K3OMN, Al Mayhinney WA3SYE and Shannon Peterson, KB8JTQ were on standby. AMCOMM 1 was on the scene for 5 hours from approximately 11 a.m. to 4 p.m.

### **SET '93**

The Annual Simulated Emergency Test for 1993 was conducted on Saturday November 20th this year. This was the event of the year for all of the Official Emergency Stations (OES), but included the Amateur Radio Emergency Service (ARES)/Radio Amateur Civil Emergency Service (RACES) operators along with the active participation of the Maryland/DC Section Traffic Manager, Bruce Fleming N3EGF and his staff of dedicated message traffic handlers that operate the American Radio Relay League (ARRL) National Traffic System (NTS).

Mike Carr WA1QAA, MDC Section Emergency Coordinator put together an excellent program for this years event to permit Section Level Leadership to assess our current state of readiness for a real emergency and to assess their ability to implement and use the MDC Emergency Response Plan (ERP) procedures at maximum effectiveness in an emergency-like communications environment. It is also designed to assess the traffic load imposed on communications paths identified in the ERP, and indicate where further enhancements to the plan may be needed. This event provided the opportunity to train ARES and RACES members in field communications techniques which can best be done by selecting challenging geographic field sites for the placement of communications teams. The selection of sites throughout a specific jurisdiction, rather than in just one locality, adds reality and stresses individual ingenuity on the part of each of the county Emergency Coordinators and team cooperation in solving the communication needs which were prescribed for SET '93.

For those individuals, Novice to No-Code Technician through the holders of an Extra Class license who would like to participate in the event next year, please contact your local county or district Emergency Coordinator or any club official immediately to see how you may be a part of the action and learn how you can "make a difference" when it comes to responding to a crisis that needs all the help it can muster. The training you attend throughout the year will help you be in a much better position for the real thing. Do it today, a disaster may strike tomorrow and it may be to late!

### **HOLIDAY GREETINGS EVENT**

The Baltimore Amateur Radio Club (BARC) held a successful Holiday Greetings Event on Saturday, November 20th to help publicize what Amateur Radio is all about, and provide a holiday greetings message service to the general public. This event was held at North Mall on Perring Parkway just north of Joppa Road in Northeast Baltimore. The traffic generated during the day was sent out via 2 meter voice and 80 meter voice and CW.

*Continued on next page*



## PUBLIC SERVICE EVENTS

Club Public Information Officers (PIOs) are highly encouraged to make every effort to publicize in local newspapers, their events set up for the general public either to make them aware of what Amateur Radio is all about, a recruiting campaign, or providing a public service such as providing a message service during the holidays. Please keep the Public Information Coordinator (PIC) informed as far in advance as possible (2 these events (the planning stage is a good place to start) so that your event may be included with other news articles being publicized that you may not be aware of. Section Level Officials also need the information for their planning purposes if it is desired that their presence is requested at these functions to help you with your efforts to promote Amateur Radio. Major Amateur Radio publications require a lead time of "two months" prior to the event. Plan ahead and make it happen well in advance so that all interested parties are well informed.

HAVE A HAPPY AND SAFE HOLIDAY SEASON

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# DX DX DX

By John Kanode, N4MM

## POSSIBLE NEW DXCC AWARDS

Now that the DXCC Department has cleared the back log and that most of the DXCC records are on the computer, some are looking forward to possible new DXCC awards. What, if anything, should be added? Should the possible new awards be aimed at the advanced DXer or should they be more for the new 1990's type of Amateur Radio operators? Two possible new DXCC award additions could be QRP and Mobile. Many of the new amateurs for several reasons, do not have the space or money to build a station that is required to work DX. Many now live in apartments and other types of housing where large antennas are not allowed or there is no room for such. With HF equipment becoming so small, mobile operation is becoming a way to get on HF. QRP is another way to beat the RFI problem. 100 watt or larger stations in tight living conditions can be a real problem due to so many RFI prone devices being use.

Should these new categories be added to the ARRL DXCC Program? What about the advanced DXer who has most of the DXCC awards and is on several Honor Rolls? What, if anything, should we do there?

The DXAC has discussed several options in the past but the interest was not there. It just could be that there is enough awards for the advanced DXers. There are now 12 DXCC programs, covering all major operating interests and there are three Honor Rolls. Some have suggested that the 5BDXCC program be expanded to 6, 7, 8 etc band DXCC. Also double 5BDXCC has been suggested. Double 5BDXCC is 200 countries on each of the 5 major HF bands.

If you have any suggestions or ideas, the DXAC would like to hear from you. Put your pen to paper or finger to the keyboard and send it to the DXAC c/o ARRL 225 Main Street, Newington, CT 06111.

## APPROVED OPERATIONS

CALL	OPERATIONS BEGINNING
4S7/OH2VZ	13 AUGUST 1993
5R8DP	12 MARCH 1993
9ER1TA	19 OCTOBER 1992
9ER1TB	19 OCTOBER 1992
A35HX	25 FEBRUARY 1993
E31A	2 AUGUST 1993
E35X	31 MAY 1993
HS0ZBJ	1 OCTOBER 1993
J3/CT3FN	21 MAY 1993
S21ZD	5 SEPTEMBER 1992
S21ZL	7 MARCH 1993
T5YOU	3 MARCH 1993
ZF2VA	28 APRIL 1993
ZK19HX	19 JULY 1993
ZK2XH	26 JULY 1993

*Continued on next page*



### **UPCOMING DXPEDITIONS**

Sri Lanka	4S7/OH2VZ	November 15 - December 15
Syria	OE3MIG/4U	To Mid December
Isle of Man	GD4UOL	November 19 - December 6
Christmas Isl.	VK9XN	November 27 - December 15

### **UPCOMING DX CONTESTS**

ARRL 160 Meter Contest	December 3-5
ARRL 10 Meter Contest	December 11-12

### **TIDBITS**

A slight wording change has been made in Rule 7 of the DXCC rules. This is reflected in the October 1993 ARRL DXCC Countries List. There was some misunderstanding and hopefully this will make it clear.

An item that showed up in the DX News Sheet said that during a QSO with Romeo, ON4VT was told that anyone missing cards for his past operations may QSL direct to his US address. Do not send any more money: Romeo Stepanenko, PO Box 766, Brooklyn, NY 11230 USA.

The recent ZD9SXW CW DXpedition resulted in the following QSO breakdown. 160m 83, 80m 687, 40m 2760, 30m 2544, 20m 3182, 17m 3061, 15m 3260, 12m 3236, and 10m 4384.

The 1994 Peter I DXpedition is on schedule with equipment on the way to the Falkland Is. 10 operators will be on all bands and modes for 16 days. The team is still looking for a good CW operator who can commit the time (6-8 weeks) and funds (\$10,000). Contact Ralph Fedor, K0IR, team leader for details.

The problem with the 9M0S QSLs have been solved and the cards are being mailed.

The North Shenandoah Dx Association will hold its annual Christmas dinner/meeting at the Golden Corral on Route 11 South of Winchester, Virginia on December 5 at 3:pm. Contact N4MM or N4SLR for details.

**Remember The Deadline For Submissions  
to Auto-Call Magazine is the 5th of the Month  
Prior to the Month of Publication!**

(EXAMPLE - If you would like to have your article or shack sale published in the January 1994 issue, your material should be submitted before December 5th 1993.)



# ELMER'S CORNER

By Paul Wilkins, AB4CY

## Metric Mania

Have you ever fired up on the 131 foot or the 33 foot band? You have if you ever worked 40 or 10 meters. Then, why does it sound so strange? All measurements are relative. We measure things by comparing them with some "agreed" standard like a ruler or a weighing scale. Our system of weights and measures just grew as it was needed. The inch is roughly the width of a man's thumb, the foot was the length of the King's right foot, the yard is from the breast bone to the tip of the outstretched index finger. Not exactly precise but good enough for the medieval market place. Our statute mile of 5,280 feet was the length of one thousand paces (right heel to right heel mark) of the marching gait of the Roman Legion stationed in Britain in 340 A.D. Mr. Fahrenheit set the lowest temperature he could achieve with water and salt as the zero on his thermometer scale.

Our standards are a jumble of units and our excuse is that we are used to them and they are alright. We have sixteenths, eights, quarters, halves, 12 inches per foot, 3 feet per yard, 1720 yards in a mile, etc. Who says we count by tens? Only in our currency. Look the clock; 60 seconds is a minute, 60 minutes is an hour but 24 hours is a day, 7 days a week, 12 months a year, but decades, centuries, and millennia are decimal. Even a pound can of coffee only has eleven and a half ounces, and you cant buy a real 2"x4" any more. Convention is hard to change. We buy our gas for the car in gallons, except if you're traveling in Canada, the gallon is an "Imperial" one that is somewhat larger than the ones we have south of the border.

It will probably surprise you but the U.S. Congress in 1888 adopted a system of weights and measures with the yard, pound, and quart defined in terms of the meter, kilogram, and Liter. The metric system has never caught on even though the rest of the world uses it exclusively. Look at any food item for export, it will be clearly marked in metric units. We buy milk in quarts but Spirits in milliliters. Wavelength is in meters but our antenna height is in feet.

The metric system was designed to simplify measurement by using units of ten and setting standards that were reproducible (not the King's foot!). The meter is one 10 millionth of the distance from a point in Paris to the North Pole. In our common system the meter is 39.36 inches long (a little over a yard of 36 inches). The kilogram is the weight of a specific volume of water at maximum density (4 degrees Celsius). Temperature for our DX friends always comes to us in degrees C(elsius) or Centigrade. The Centigrade scale has 100 degrees (hence the Centi prefix). Zero degrees is the freezing point of pure water and 100 is the boiling point (Fahrenheit values are 32 degrees for freezing and 212 degrees for boiling).

All of our prefix units (pico,micro,milli,deci,deka,centi,kilo, and Mega come from the metric system so we regularly use them for electrical measurements of voltage, current, resistance, frequency, etc. and they don't get us into much trouble. But try to get an American nut to fit on a metric screw and its a different story. Foreign made automobiles and other mechanical equipment come with metric measurements. This causes garage mechanics to have two sets of tools, and VCR's are designed with metric parts. There has been a push for us to convert to full metric in order to be more competitive in the world market. Over there, an inch, a foot or a pound is meaningless. There was a day when we led the pack and could do anything we wanted to. Now we are the backward ones and have to explain what we are talking about. Unfortunately most of us can't do it very well because we haven't taken the time to understand it either. Next time, give it a try. We are going to have to change and we might as well be leaders in that effort, after all hams form an International community.



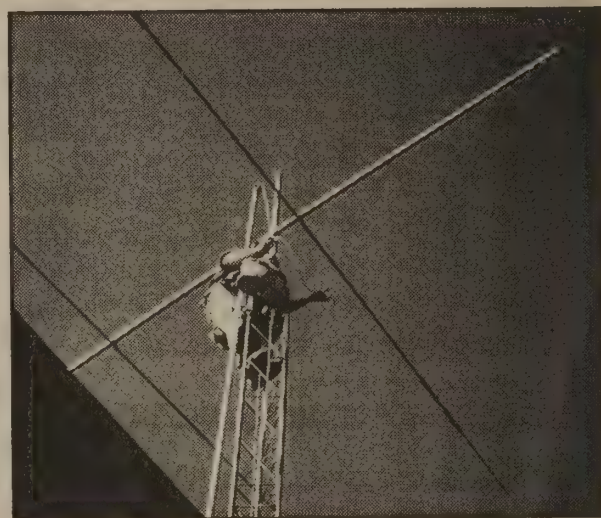
## SKYWARN ADVISORY COMMITTEE HAS FIRST MEETING

The first SKYWARN Advisory Committee Meeting was held at the National Weather Service (NWS) in Sterling, VA on October 5, 1993. Representatives from ARES, RACES, and REACT groups from Maryland/DC, Northern Virginia, and West Virginia, as well as members of the NWS staff attended the meeting. The purpose of the Advisory Committee is to provide a forum for the input of suggestions to improve the SKYWARN program.

The group set two goals for the coming year. The first is to provide a better VHF or UHF link into the eastern panhandle of West Virginia from the Washington Forecast Office. The second goal is to further develop the HF capabilities, procedures and protocols throughout the SKYWARN system. It is anticipated that HF will be used to monitor the Hurricane Watch Net, to directly contact other NWS offices, and to monitor and coordinate with various state ARES and RACES emergency nets. During the past two years we have successfully used HF during hurricanes Andrew, Emily, and Zelda. The goal is to get an HF station set up on a permanent basis with set procedures to be ready for regionwide emergencies.

### NWS RECEIVES DONATION OF TOWER AND - HF ANTENNA

The NWS gratefully acknowledges the donation of a 35 ft. Rohn 25g tower, rotor, and Cushcraft 10, 15 and 20 meter beam. It is hoped to have this tower installed at the NWS by spring of 1994. An HF transceiver may also be made available to the NWS. Much thanks goes to Carmen H. Gaines KF4NZ for her generous donation which will hopefully be used to help save lives and property through SKYWARN activities in the future. Thanks also go to the tower take-down crew, AB4CY, KB4CVL, KD4DGQ, KD4CSO, WB4PFJ, KC4OCG and KD4PUP.



*Mike KB4CVL bringing down the antenna*

### NO ACTIVATIONS IN OCTOBER

We are pleased to report that there were no severe weather SKYWARN activations during October!

### WEATHER ALERT ON 146.910- NVFMA REPEATER

The Northern Virginia FM Association is testing an weather alert interface on the 146.910- W4XG Tysons Corner repeater. When the NWS tone alerts a watch or a warning on 162.55MHz, the NVFMA repeater will transmit a warning message once a minute for the ten minutes following the NWS alert tone with a CTCSS tone of 131.8 Hz. it is hoped that this feature is on line by the time this article is published. more details are in this month's NVFMA column.

## SKYWARN TRAINING

Saturday, November 20, 1993  
Cumberland, MD Red Cross  
SKYWARN Basic II 9am - 11:30am  
Winter Storm 1pm - 3pm  
Contact Red Cross at (301) 722-1760

Saturday, December 4, 1993  
Lord Fairfax Community College  
SKYWARN Basic I 9am - Noon  
Winter Storm 1:30pm to 3:30pm  
Contact: Fred Wetzal (703) 678-0394

Sean McClanahan (703) 869-4374

Dan KC4OCG



# FCC HIGHLIGHTS

By Jack Kelleher, W4ZC

## IMMEDIATE TEMPORARY OPERATING AUTHORITY PROPOSED FOR NEWCOMERS

On October 23 the FCC adopted a Notice of Proposed Rulemaking (PR Docket 93-267; RM-8288) on Amendment of the Amateur Service Rules to Extend Temporary Operating Authority to New Amateur Operators.

Section 97.9 of the Commission's Rules currently authorizes immediate temporary operating privileges to amateur operators who upgrade their class of license. The procedure, however, does not apply to those successful candidates who do not already hold a valid license.

The FCC Notice reads in part: "To better serve new amateur operators and to increase productivity in the processing of license applications, we propose to amend Section 97.9 to extend temporary operating authority to new successful candidates until receipt of the full-term license." (The FCC proposes to limit this temporary authority to 120 days because a full-term license would normally be issued within that time; it is an indication that the application was not received for processing when a license is not issued within 120 days)

The Notice continues "The temporary operating authority, however, would not be available to any prior amateur service licensee whose license was revoked, suspended, or surrendered for cancellation following notice of revocation, suspension, or monetary forfeiture proceedings. Nor would it be available to any person who is the subject of a cease and desist order that relates to amateur service operation and which is still in effect. Language to cover these restrictions is contained in the proposed rules. Neither would it authorize any station operation that may have a significant environmental effect as defined by Section 1.1307 of the Commission's Rules. 47 C.F.R. para. 1.1307. Also, the temporary authority would terminate, if the application is returned without action. In addition, the proposed rules provide that the Commission, in its discretion, may cancel the temporary operating authority without a hearing, if the need for such action arises."

"For purposes of over-the-air identification, we propose that stations that are operated by a new control operator exercising temporary operating authority shall use a temporary call sign determined by the person's initials and mailing address. The prefix for each such call sign would be WZ. This unique prefix would identify the station as a new amateur station awaiting a license. The prefix would be followed by a number corresponding to the VEC Region for the mailing address shown on the license application. The person's initials and an indicator denoting the license class would follow the VEC Region number. (For example, applicant John Doe, who passed an examination for a General Class operator license, living in Quincy, Illinois, would use the temporary call sign WZ9JZD/AG. The complete rationale for temporary call signs is set forth in the proposed changes to the Rules).

The Comment deadline is January 10, 1994. Reply Comments are due February 10, 1994.

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## **SPECIAL CALL SIGNS**

Last June the FCC released a Public Notice notifying the public that it was accepting applications for "Club and Military Recreation Station Call Sign Administrators". Several organizations responded; but the American Radio Relay League challenged the qualifications of other applicants, and the program has not yet been implemented.

In August President Clinton signed the Budget Reconciliation Act of 1993, which contains a list of fees that the FCC may assess and collect "in advance for a number of years not to exceed the term of the license held by the payor." The list includes Amateur vanity call signs, for which FCC is authorized to collect an annual fee of \$7.

Rumors are rife concerning the relationship of these two actions. The front page headline in the W5YI Report for November 1st is "Club Call Sign Program in Jeopardy", and a front page headline in Westlink Report for October 28 is "Special Callsign Program Scuttled".

Our information is that the situation is being reviewed carefully by the FCC, especially in connection with the capabilities of new computer facilities at Gettysburg. Until that review is complete, your editor is going to sit back and wait.

## **STATION LOCATION DROPPED FROM FCC LICENSE FORMS**

In an Order dated September 24, 1993, the FCC said that it will no longer require that a station location be shown on amateur license applications, nor on applications for reciprocal operating permits, effective November 15, 1993.

The Commission said that because portable and mobile equipment is now so often used by amateurs, a station's location often changes, sometimes even daily. FCC also said that deleting the station location requirement would expedite the processing of license applications. They said that since this rule amendment is not likely to be controversial and that it is a "nonsubstantive" change in licensing procedures, no notice and comment period was needed.

The amended FCC Rule "Section 97.21, Mailing Address" will read "Each application for an amateur service license and each application for a reciprocal permit for alien amateur licensee must show a mailing address in an area where the amateur service is regulated by the FCC. The mailing address must be one where the licensee can receive mail delivery by the United States Postal Service." (Tnx ARRL).

## **THE IMPACT OF NO CODE ON UPGRADING**

The W5YI Report for October 15th contains an interesting report of an investigation by the W5YI organization into the FCC's licensing records for the three years before and after "No-code" (The first codeless license was issued on March 12, 1991).

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Their research revealed that an average of 1,070 Technicians upgraded to the General (and higher) Class monthly during the three years prior to "No-code". In the 29 months after March 1991, the number of Technicians upgrading to General (and higher) is an average of 1,336 monthly, an increase of 25%.

The report goes on "It thus appears that the No-code Technician Class has actually helped increase the number of telegraphy-proficient amateurs. The reason is probably that there is simply a larger pool of radio-oriented people entering ham radio". "The exposure to the hobby and to other "mainstream" operators seems to have motivated newcomers to upgrade. Actually the same thing happened when Citizen's Band radio was fashionable in the early and mid-1970's. The popularity of two-way radio communications prompted many CB operators to become licensed ham operators.

"There can be no doubt, however, that the biggest impact of "no-code" is on the Technician Class itself. The following chart shows the annual percent growth for the five years prior to no-code - and for the 29-month period, on an annual basis, after April 1991. The Technician Class was already the fastest growing class before 1991 with an average annual gain of nearly 12%. It mushroomed to 25% once the 5 wpm code test was abolished for new entry level Technician. (Ed: The following is a summary of the chart in the W5YI Report):

**Annual growth**

	Before No-code Technician	After no-code Technician
Extra	7.9%	6.9%
Advanced	1.6%	2.3%
General	0.7%	2.0%
Technician	11.7%	25.3%
Novice	4.3%	1.9%
Total all classes	4.5%	8.7%

**PCS GETS GO-AHEAD**

The FCC has approved the creation of the Personal Communications Service (PCS), and has done so without having any impact on amateur radio. On September 23rd the Commission voted to adopt new guidelines for establishing this new form of wireless 'phoning, designating it as its own service.

The FCC is expected to assign PCS a semi-exclusive 120 MHz of frequencies between 1.8 and 2.2 GHz. This spectral region is now used by a variety of services, and "shoehorning in" PCS may well be a formidable task. There are no Amateur Service allocations in the segment 1.8-2.2 GHz; but there is always the possibility that Services which may be displaced from that band in favor of PCS may end up having an impact on Amateur Service allocations.

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Westlink Report, in its October 14 edition, says that PCS equipment will be similar to cellular telephones and is expected to be introduced at retail prices under \$300. Like cellular telephones, PCS units will use a network of receivers and transmitters in "cells", but there are expected to be many more cells with PCS, located closer together than in conventional cellular systems. Consequently, far lower user transmitter power will be needed to go from a user unit to a cell.

Promoters of PCS say the system will sound better, cost less and draw more customers than the cellular 'phone industry. Some analysts believe that PCS could be used by 12,000,000 people in just three years, and play an important role in emerging world communications to the most personal of levels. Others believe the system may be an also-ran and simply supplement the current cellular system by allowing formation of smaller, less powerful wireless networks, such as within a building.

### MORE ON BIO HAZARDS OF EM RADIATION

The FCC has proposed changing its guidelines for evaluating environmental effects of RF radiation to align them with the guidelines adopted in 1992 by ANSI and IEEE (see May 1993 column). The IEEE version of the 1992 Standard is the work of the IEEE Committee on Man and Radiation (COMAR), chaired by Dr. John M. Osepchuk, a research physicist for the Raytheon Company in Lexington, MA.

The lead article in the W5YI Report for October 1, "New RF Exposure Standard could impact Ham Radio", reports on contact with COMAR by W5YI, Vice Chairman of the VEC's Question Pool Committee. W5YI's primary interest is in updating amateur examination questions which deal with RF exposure to amateur operators and to the public who may be in close proximity to amateur radio stations. Specifically, what are the power, frequency and distance guidelines for the ham operator and his residential neighbors?

The responses to W5YI's inquiry included a letter from COMAR member Richard A. Tell - K5UJU - which is too long to be quoted here in its entirety, as it is in the W5YI Report. However, the following excerpt is informative:

"....we offer for your consideration two possible questions that might be determined to be useful in the question pools used by volunteer examiners:

(1) What have most scientific studies shown that biological effects of RF fields determined at different frequencies used by most amateur radio operators are correlated with? (Answer (c)

- (a) RF field strength (V/m)
- (b) RF power density (mW/cm sq)
- (c) Specific absorption rate (W/kg)
- (d) Percentage Modulation

(2) To avoid excessively high human exposure to RF fields, how should amateur antennas generally be mounted? (Answer (b)

- (a) with a high current point near ground
- (b) as high and away from accessible areas as possible
- (c) on a non-metallic mast
- (d) with the elements in a horizontal polarization.."



## From The BARC Program Chairman - Bruce Packham, W3UWV

The Baltimore Amateur Radio Club is pleased to announce some of its upcoming programs for the "third" Wednesday (it does vary) meetings held at Dulaney Senior High School at 7:30 PM on Padonia Road in Timonium, Md. Take exit 24 from Beltway 695 to Interstate 83 North. Next, take exit 17 from 83 North (Padonia Road) staying in right lane and proceed east on Padonia Road through the next 5 traffic lights (York Road is 3rd one and you will see Padonia Village S. Cntr. on far right corner). After the 5th traffic light, proceed for an additional 0.75 miles and on your right will be the school. Enter the school ground and park in the school lot. Someone on our BARC repeater [ 146.67 (minus) ] is ever ready to "talk you in" on club meeting nights. Our meetings are held in the Electrical Shop (lower level) of the school.

I believe we have some excellent offerings lined up for one and all. Let me say once again that anyone, club or individual, is invited to come to these events. If these programs interest you and you would like to attend, then please do so. These are for you. Many are rare offerings and will not be presented again anytime soon, so avail yourself of the opportunity. If you like, you may call me at (410) 687-4945 for further details.

The DECEMBER 1st program is very special. The subject will be: The National Radio Company History and Early Receivers. To present this subject we have one of the recognized leading collectors of National Radio equipment and memorabilia, John Kelly. John and his wife Suzzane will both visit us on the 1st of December. Please Note The Date, Dec. 1st! John lives in Gaithersburg and will bring several examples of early and notable National Company communications receivers with him for us to see in the flesh. National was a leading manufacturer of some outstanding and now historically significant radios. This is the company that spawned the James Millen and the SW-3, a famous combination if ever there was one. (John will bring an SW-3 as well as other National receivers with him). Although John is a ham, N3GVF, his interest is principally that of a collector, but his talk will be slanted toward we who are interested in our heritage as radio operators and users of communications equipment. Plan on this one!

On JANUARY 5th, yours truly will present a program on: Matching An Antenna Using A Noise Bridge and Related Topics. He will bring a receiver, noise bridge, and related paraphernalia and will measure some sample transmission line impedances and so on, by way of demonstration. He will offer his experience in matching his 80/40 meter antenna installation which required more than "cut the wire and pull it up" to install. He'll touch upon how some of the gadgets and gillhoolies work, the dreaded "j", and discuss some possible antenna related misconceptions just to liven things up a bit. I've heard this man speak before and personally, I plan on being there. As a wag friend of mine said, "Don't miss this one, ....if you can! "

For FEBRUARY 16th, we do have a treat. Heru Walmsley, W3WVV, will speak to us and demonstrate: ATV Transmission On 10 Gigahertz. Yes folks, that's 10 very big ones! What's more, Heru promises that the RF equipment he will be using can be purchased commercially at a reasonable price for those who would like to get started in microwaves. No Klystrons or Lighthouse tubes in tuned cavities to bedevil those who lack a machine shop. W3WVV always takes an interesting technical journey and I'm ready for the trip.

*Continued on next page*



Continued from page 23

Anyone who has been to one of Heru's presentations knows that he is always a very interesting, informative, and exciting speaker. Heru is one of the best presenters I know. My wife plans on coming to this one. He is not to be missed! Mark your calendar!

On MARCH 2nd, for contrast in subject, we visit the other end of the frequency spectrum and go to the land of VLF. We are fortunate to have Henry Lee, KB1PE, who will present a demonstration and talk on the world of 1750 meters and Ultrasonics entitled: What's Up Down Below? Zounds! Shades of 1905 and spark gaps. But, we'll find that although a license is not required for such transmissions, the FCC regs don't make communication all that easy. Henry has given this talk quite a few times in the New England area and now that he lives here in Baltimore, promises to reveal all to us with some interesting demonstrations. I have discovered that Henry is a Mel Blanc in disguise and can imitate almost all of the sounds one is likely to hear on these frequencies... if he can't find them on his receivers. Here is an operator who is to be found operating on 160 meters and UP! This will be a good one.

For APRIL, I'm working on getting a talk on Radio Astronomy. The potential presenter lives quite a distance out of town and this may not come together.....wish me luck.

# The R.F. Connection

"SPECIALISTS IN RF CONNECTORS AND COAX"

RIGHT ANGLE ADAPTER UG-1068/U  
RECEPTACLE JG-76A/U  
HOOD UG-106/U  
PLUG UG-88/U  
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STRAIGHT ADAPTER PL-258  
BULKHEAD JACK UG-62A/U  
RIGHT ANGLE RECEPTACLE UG-109A/U  
PLUG UG-295/U PL-259  
RCA  
STRAIGHT ADAPTER UG-57B/U  
TEE ADAPTER UG-274B/U  
STRAIGHT ADAPTER UG-814/U  
RECEPTACLE DOW-KEY 201  
STRAIGHT ADAPTER F-2  
BULKHEAD JACK UG-62A/U  
RECEPTACLE UG-296/U SO-239  
HOOD UG-366/U  
TEE ADAPTER UG-177B/U  
BULKHEAD ADAPTER UG-447D/U  
RECEPTACLE UG-290/U  
HOOD MK-367A/U  
RIGHT ANGLE ADAPTER UG-646/U  
RIGHT ANGLE ADAPTER UG-27C/U  
JACK UG-231/U  
PLUG UG-216/U  
PLUG UG-216/U  
RECEPTACLE UG-109A/U  
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MAKE THE CONNECTION

**The R.F. Connection**  
213 N. Frederick Ave., Suite 11, Gaithersburg, MD. 20877  
301-840-5477

280



FOUNDATION FOR AMATEUR RADIO  
VOLUNTEER EXAMINER COOPERATIVE

NEW ADDRESS	JOHN FORREST WZ4A 6111 BURNETT ST ALEXANDRIA, VA, 22310 (703)971-3905	NEW ADDRESS
-------------	--	-------------

NOTICES:

- \* EFFECTIVE JULY 1, 1993, NOVICE EXAMS MAY ONLY BE ADMINISTERED AT A VEC SESSION. THE PRIOR PROCEDURE OF ADMINISTRATION BY 2 GENERAL CLASS OR HIGHER AMATEURS HAS BEEN ABOLISHED.
- \* EFFECTIVE JULY 1, 1993, THE NOVICE AND TECHNICIAN WRITTEN QUESTION POOLS (ELEMENTS 2 AND 3A) HAVE BEEN CHANGED. EXAMS ADMINISTERED AFTER THAT DATE MUST USE THE NEW QUESTION POOLS.

**SCHEDULE OF EXAMINATIONS  
1993**

DECEMBER 4, 1993 (SATURDAY)

MIDDLETOWN VE TEAM (MIDDLETOWN, VA)(ARRL VEC)  
LIMITED WALK-IN  
CONTACT: WALT QUITTER NC4B (703)869-5241

VIRGINIA BEACH ARC (VIRGINIA BEACH, VA)(ARRL VEC)  
WALK-IN ACCEPTED, PRE-REGISTRATION PREFERRED  
CONTACT: ED ROBINSON WD4GOY (804)468-0866

WCARS (ROANOKE, VA) CALL FOR INFORMATION  
CONTACT: FRED HORTON (703)366-6266

UNIVERSITY OF MARYLAND ARC (COLLEGE PARK, MD)(W5YI VEC)  
WALK-IN  
CONTACT: SCOTT ROSENFELD NF3I (301)206-9921

DECEMBER 5, 1993 (SUNDAY)

D.C.M. ARC (LANDOVER, MD)(W5YI VEC) WALK-IN  
CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)  
(301)773-2898 (EVENING)

DECEMBER 10, 1993 (FRIDAY)

PIEDMONT TECHNICAL CENTER (CULPEPPER, VA)(ARRL VEC)  
PRE-REGISTRATION  
CONTACT: BILL BROWN AC4KP (703)547-3089

*Continued on next page*



DECEMBER 11, 1993 (SATURDAY)

MASSANUTTEN ARA (HARRISONBURG, VA)(ARRL VEC) WALK-IN  
CONTACT: MARSHALL COOPER N4ZKH (703)856-8012  
BETWEEN 6-9 PM

MOUNTAIN ARC (CUMBERLAND, MD)(MOUNT ARC-VEC) WALK-IN  
CONTACT: LEO PATTERSON KQ8E (304)289-3576  
GAY REMBOLD W3DFW (301)724-0674

ANNE ARUNDEL RADIO CLUB (DAVIDSONVILLE, MD)(LAUREL VEC)  
WALK-IN  
CONTACT: NANCY ALLEY NT3Z (410)761-7115  
BOB ISRAEL WC3I (301)262-5083

RICHMOND, VA (ARRL VEC) PRE-REGISTRATION REQUESTED  
CONTACT: RICK COOK AB4U (804)798-5048

MT. VERNON ARC (ALEXANDRIA, VA)(LAUREL VEC) WALK-IN  
CONTACT: FRANK MACKEY N4GUS (703)455-1510

OLE VIRGINIA HAMS ARC (MANASSAS, VA)(ARRL VEC) WALK-IN  
CONTACT: HARRY VORHAUER W4PVA (703)368-6050

DECEMBER 16, 1993 (THURSDAY)

BALTIMORE ARC (TOWSON, MD)(ARRL VEC)  
CONTACT: BOB KENNICK WB3HNV (410)426-8255

**SCHEDULE OF EXAMINATIONS  
1994**

JANUARY 2, 1994 (SUNDAY)

D.C.M. ARC (LANDOVER, MD)(ARRL VEC) WALK-IN  
CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)  
(301)773-2898 (EVENING)

JANUARY 8, 1994 (SATURDAY)

ANNE ARUNDEL RADIO CLUB (DAVIDSONVILLE, MD)(LAUREL VEC)  
WALK-IN  
CONTACT: NANCY ALLEY NT3Z (410)761-7115  
BOB ISRAEL WC3I (301)262-5083

MT. VERNON ARC (ALEXANDRIA, VA)(LAUREL VEC) WALK-IN  
CONTACT: FRANK MACKEY N4GUS (703)455-1510



DEPARTMENT OF STATE/GWU ARCS (WASHINGTON, DC)(ARRL VEC)  
WALK-IN  
CONTACT: DERRILL ROHLFS W3WOX (202)994-5509 (DAY)  
(301)423-0179 (EVENING)

JANUARY 15, 1994 (SATURDAY)

LAUREL ARC (LAUREL, MD)(LAUREL VEC)  
PRE-REGISTRATION DESIRABLE  
CONTACT: JOHN CREEL WB3GXW (301)572-5124 AFTER 6 PM

JANUARY 30, 1994 (SUNDAY)

ANTIETAM RADIO ASSN ARC (HAGERSTOWN, MD)(ARRL VEC)  
PRE-REGISTRATION REQUESTED  
CONTACT: PAGE PYNE WA3EOP (301)714-0688 (DAY)  
BOB LONG KD3JK (301)824-5132 (EVENING)

EXAM FEES:

- \* CHECK FOR APPROPRIATE EXAM FEE. FEES AND MODES OF PAYMENT FOR INDIVIDUAL VECs AND EXAM TEAMS MAY VARY.
- \* ARRL VEC EXAMS COST \$5.60
- \* LAUREL VEC EXAMS ARE FREE
- \* MOUNTAIN VEC EXAMS ARE FREE
- \* W5YI VEC EXAMS COST \$5.60

BRING TO EXAM:

- \* PICTURE IDENTIFICATION
- \* COMPLETED FCC FORM 610 (MOST VE TEAMS WILL SUPPLY AT EXAM)
- \* ORIGINAL AND A COPY OF CURRENT FCC AMATEUR RADIO LICENSE
- \* ORIGINALS AND COPIES OF ALL ACTIVE CERTIFICATES OF SUCCESSFUL COMPLETION OF PRIOR EXAMS
- \* EXAM FEE (CHECK OR CASH DEPENDING ON VE TEAM)

"GRANDFATHER" CREDIT FOR ELEMENT 3B (GENERAL WRITTEN):

- \* IF YOU PRESENTLY HOLD A TECHNICIAN CLASS LICENSE WHICH WAS FIRST ISSUED PRIOR TO MARCH 21, 1987, YOU MAY BE GRANDFATHERED FOR ELEMENT 3B (GENERAL CLASS WRITTEN EXAM) BY PRESENTING THE ORIGINAL AND A COPY OF THE LICENSE DATED PRIOR TO MARCH 21, 1987 TO THE VE TEAM. IT IS YOUR RESPONSIBILITY TO PROVE THAT YOU ARE ENTITLED TO GRANDFATHERING. DO NOT LOSE YOUR ORIGINAL LICENSE!

RULES FOR SUBMISSIONS TO THE FAR VOLUNTEER EXAMINER COOPERATIVE:

1. ALL SUBMISSIONS MUST BE IN WRITING
2. DATE AND DAY OF WEEK MUST BE SPECIFIED FOR EACH EXAM DATE
3. POINT OF CONTACT AND PHONE NUMBER MUST BE SPECIFIED
4. SPONSOR AND LOCATION MUST BE SPECIFIED
5. VEC MUST BE SPECIFIED
6. EXAM DATES UP TO 12 MONTHS IN ADVANCE WILL BE ACCEPTED



# MARYLAND MOBILEERS AMATEUR RADIO CLUB, INC.



## POST HOLIDAY SWAPFEST AND FLEAMARKET



**SUNDAY JANUARY 30, 1994**  
**8 A.M. Till 2 P.M.**

**Odenton Vol. Fire Dept. Hall**  
**1425 Annapolis Road (Rt. 175)**  
**Odenton, Maryland**

*(Located on Route 175, 9 Miles East of I-95)*

**\$3.00 Donation at the Door**

### *FEATURES:*

✓ **INDOOR FLEA MARKET**

**(NO TAILGATING)**

✓ **FREE PARKING**

✓ **V.E.C. TESTING**

**(ADVANCED REGISTRATION REQUESTED)**

✓ **TALK-IN ON 146.205/805**

✓ **REFRESHMENTS AVAILABLE**

**FOR GENERAL INFORMATION/TABLE RESERVATIONS CONTACT:**

**Tom, KA3OMU at (410) 969-2639 (Evenings)**

**or mail a donation of \$5.00 (covers Table and one operator) make check payable to:**

**MMARC Inc., P.O. Box 935, Severn, MD 21144**

**DEADLINE FOR MAIL IN RESERVATIONS IS 1/10/94**

**FOR V.E. TESTING INFORMATION AND REGISTRATION CONTACT:**

**Jerry, NU3D, at (410) 761-1423 (Anytime)**



# RICHMOND FROSTFEST '94

## Winter Amateur Radio and Computer Show

### SUNDAY, JANUARY 16, 1994

The Showplace, 3000 Mechanicsville Turnpike, Richmond, Virginia



**Hours: 8:30 A.M.-3:30 P.M.**

**An ARRL Approved Event**



**Presented By The Richmond Amateur Telecommunications Society**

#### GENERAL INFORMATION

**DEADLINE FOR ALL RESERVED SPACES AND ADVANCE TICKET SALES IS DECEMBER 30, 1993.** No space reservations or advance tickets after that date. Any unsold spaces will be available on the day of the show. All monies for advance tickets and reserved spaces must be received no later than January 7, 1994.

**SAME LOCATION AS LAST YEAR!** Building available for set-up from 12:00 p.m. until 8:00 p.m. on Saturday, January 15th, and from 6 a.m. till 8 a.m. on the day of the show. Drive-in for unloading available on Saturday only.

**AMATEUR RADIO EXAMS GIVEN ON SATURDAY, JANUARY 15, AT 7:30 p.m. NO WALK-INS.** For more information and/or registration for exams, contact Phil Giella at (804)561-3020 or Bill Mason at (804)745-5244.

**LOTS OF PRIZES!** Exhibitor, hourly, and major door prizes. Hourly prizes drawn starting at 9 a.m. Exhibitor prize drawn at 3 p.m. Major prizes drawn at 3:30 p.m.

**FIRST-RATE TALK-IN SERVICE!** Talk-in provided Sunday morning on the 146.88 and 145.43 repeaters.

**TICKETS AND RESERVATIONS:** Mark Huff, WA4DHY, (804)747-0227 (M-Th 2p-10p, Fri 11a-7p)  
**OTHER INFORMATION:** Bill Mason, AB3P, Frostfest Director, (804)745-5244 Evenings

#### REGISTRATION FORM

NAME \_\_\_\_\_ TELEPHONE \_\_\_\_\_

BUSINESS NAME or AMATEUR CALL SIGN \_\_\_\_\_

ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

\_\_\_\_\_ COMMERCIAL BOOTH SPACES (8' each) @ \$40.00 FIRST TABLE,

\$35.00 EACH ADDITIONAL TABLE (Price includes admission, tables, and electrical power).....\$ \_\_\_\_\_

\_\_\_\_\_ GENERAL (NON-COMMERCIAL) FLEA MARKET TABLES (8') @ \$15.00 EACH (MAX. OF 10).....\$ \_\_\_\_\_  
(Non-Commercial Exhibitors must also purchase General Admission Tickets)

\_\_\_\_\_ ELECTRICAL POWER FOR FLEA MARKET AREA @ \$5.00 .....\$ \_\_\_\_\_  
(Payment of one power fee covers all flea market tables for an exhibitor and includes access to one 120V outlet)

\_\_\_\_\_ ADMISSION TICKETS @ \$5.00 EACH.....\$ \_\_\_\_\_

ENCLOSE SELF-ADDRESSED STAMPED ENVELOPE IF ONLY ORDERING ADMISSION TICKETS  
MAKE CHECKS PAYABLE TO RICHMOND FROSTFEST (POSTDATED CHECKS NOT ACCEPTED)

TOTAL: \$ \_\_\_\_\_

MAIL THIS FORM, WITH YOUR CHECK AND S.A.S.E., TO:  
RICHMOND FROSTFEST, P.O. BOX 6673, GLEN ALLEN, VA 23058

CUT-OFF FOR ADVANCE TICKETS AND RESERVATIONS IS DECEMBER 30, 1993



# Training Classes

## General Information

Alexandria Radio Club.....	Rich Adamy - KA4GFY .....	(703) 644-3920
Anne Arundel Radio Club.....	Tony Young - WA3YLO.....	(301) 262-1917
Arlington Amateur Radio Club.....	Fred Bardsley - WD4DHW.....	(703) 533-0372
Antietam Radio Association.....	Robert Long - KD3JK .....	(301) 824-5132
Baltimore Radio Amateur TV Society.	Joe Chidester - W3SHZ.....	(410) 602-0353
Fauquier Amateur Radio Club.....	Neil Spokes - AB4YK.....	(703) 364-3861
Frederick Amateur Radio Club.....	Steve Bauman - W3FOA.....	(301) 662-4552
Herndon Repeater Group.....	Michael Weber - WB8RDN.....	(703) 450-2304
Laurel Amateur Radio Club.....	Pud Reaver - W3DQI.....	(301) 498-6293
MADRAS.....	Larry Ziecheck - N3GKS.....	(301) 984-6112
Maryland Mobileers ARC.....	John Baugus - N3JME.....	(301) 551-3161
Montgomery Amateur Radio Club....	Jane Rosenthal - AA3CQ.....	(301) 762-6262
Mount Vernon Amateur Radio Club..	John Forrest - WZ4A.....	(703) 971-3905
NASA/Goddard Amateur Radio Club.	Vikki Gigante - KA3PVS.....	(301) 249-2609
Ole Virginia Hams ARC.....	John Fritsch - N4YOB.....	(703) 791-5995
Pentagon Amateur Radio Club.....	David Boyd - K9MX.....	(703) 659-6241
Rock Creek Amateur Radio Assn....	Walt Ramsey - AK3B.....	(301) 949-3954
St. Mary's County ARA .....		(301) 862-2214
Shenandoah Valley ARC.....	Guy Black - W4PSJ.....	(703) 722-4952
Southern Maryland ARC.....	Vic Curtis - WA3YUV.....	(301) 888-1388
Southern Patuxent ARC.....	Dwayne Kincaid - WD8OYG.....	(301) 586-2177
Springfield Estates ARC.....	Will Schmitt - KD4CNX.....	(703) 768-5709
Stafford Adult Education.....	Jerry Mullinix - AC4HK.....	(703) 659-3905
Sterling Park Amateur Radio Club..	Mark Johnson - WS3N.....	(703) 430-3804
Tri-County Amateur Radio Club.....	John Creel - WB3GXW.....	(301) 572-5124
Vienna Wireless Society.....	Paul Wilkins - AB4CY.....	(703) 560-2779
Woodbridge Wireless, Inc.....	Loyd Davis - K8EI .....	(703) 360-0248

### 1994 Training Courses For The Herndon Repeater Group

Contact person: Mike Weber, WB8RDN

Herndon Repeater Group Educational Coordinator

(703) 450-2304

General License Course (Code and Theory)

February 19 - April 30, 1994. This class will meet EVERY OTHER Saturday Morning in Sterling, VA for a total of 6 sessions.

Novice/Technician License Course (Code and Theory)

September 10 - November 19, 1994. This class will be held EACH Saturday Morning in Herndon, VA

## FOUNDATION MEETING

The Foundation for Amateur Radio, Inc. meets at 8: p.m. on the second Wednesday of each month.

**Visitors are always welcome**

**The next meeting will be on Dec. 8 in Takoma Park, Maryland  
Columbia Union College Science Building Auditorium, Flower Avenue**

(Take beltway exit 30 South on Colesville Road to  
Franklin Avenue, East on Franklin to Flower, South to the college)

**Talk-in on 147.18**



## **THE SPRINGFIELD ESTATES ELEMENTARY SCHOOL ARC (SEESARC)**

- ♦ **MEETINGS:** First Friday of every month at 7:30 pm: Springfield Estates Elementary School Room 19, 6200 Charles Goff Drive, Springfield, Virginia 22150
- ♦ **President:** Will Schmitt, KD4CNX 703-768-5709
- ♦ **Vice President:** Savannah Lyons, KE4CLL 703-550-9759
- ♦ **Secretary:** Daniel Keegan KD4CNY 703-971-2389
- ♦ **Treasurer:** Vishal Madhavan, KD4EKD 703-765-1004
- ♦ **Landline BBS:** Conference #4 on Dos Spitzen Sparken BBS 703-791-6198
- ♦ **Mailing:** SEESARC, 6200 Charles Goff Drive, Springfield, VA 22150

SEESARC has started the school year off right. Our combined Novice/Tech classes have always been terrific parent-child joint ventures, and this year is no exception. We have students from 3rd to 8th grade; their parents are assisting and learning, right along with them. These fifteen new students have been meeting once a week for three weeks. Bill Schmitt KD4CNS is been using a video program for the first time, and everyone seems to be enjoying it. Keith KO410 and Luke KO4IQ are teaching the Morse Code section of the course; they have created audio tapes to supplement the ARRL tapes. The advantage of the Ward tapes is that they give letters randomly, so students can't memorize the words as they can with the ARRL tapes.

SEESARC finished **SECOND PLACE** this year in the Elementary School category of the nationwide School Club Roundup. We're aiming for first place next year!

Jamboree-on-the-Air was a great success this fall. It was held at Claude Moore Farm near Dulles Airport during the Boy Scout George Washington District Fall Camporee on October 15-16. We operated two HF stations, one on 20 meters and one on 10 meters, as well as a 2-meter packet station. For

the second year in a row, we had terrific DX conditions, and many Boy Scouts were able to hear contacts being made with overseas locations, especially Europe.

We had our monthly meeting on Friday, November 5th. Under old business (very old business), we discussed our logo. We are going to make a final decision on our logo at the next meeting and get it printed onto T-shirts. Several members also mentioned their plans to participate in upcoming contests and sweepstakes. Our meeting ended with a video on SAREX, the Shuttle Amateur Radio Experiment. The Club is planning more presentations about ham radio in space and about slow-scan TVs.

SEESARC welcomes any and all donations of ham radio equipment (working or not) to the Club. SEESARC would also like to ask Licensed Ham Operators to work with the club. Please contact Bill Schmitt (703-768-5709) if you're interested.

Our next meeting will be at 7:30 pm on Friday, December 3rd, at Springfield Estates Elementary School in Springfield, Virginia. Visitors are welcome. We look forward to seeing you!

Matthew Keegan KD4NSF

**Our DEADLINE is  
The 5th of the Month Prior to the Month  
of Publication!**

**Question or Comments?**

**Send Them to:  
Doug Allen, Editor  
8008 Shadow Oak Lane  
Pasadena, MD 21122**



## Anne Arundel Radio Club

- **MEETINGS:** 8 PM 1st and 3rd Thursdays, Davidsonville Family Recreation Center, Queen Anne Bridge & Wayson Roads off MD Rt. 214 near Annapolis.
- **ON THE AIR:** 2030 Thursdays when there is no club meeting on 147.705/105. Tuesdays at 2030 local time on 28.410. The Chesapeake Weather & Traffic Net on 147.705/105 at 1100 and 1500 every weekend day and public holiday from April 1 to November 15. MSN (Maryland Slow Net) every evening at 1930 on 3.7170 MHz.
- **ADDRESS:** P.O. Box 308, Davidsonville, MD 21035
- **INFORMATION:** Margaret (Holly) Bevan, 301-923-0229

Monday evening November 1st was the final Aviation Net on 147.075 MHz. Net Manager Jeff Katz/N3KZV unfortunately does not have the time to continue running the net and other controllers did not come forward. He feels that the net accomplished its goal of providing safety and other general information to pilots and aviation enthusiasts. Says Jeff, "I want to thank all those who have participated and supported the net since its inception on June 1, 1992.11

The last AARC Weather & Traffic Net for the boating season was held on Sunday afternoon November 14th. Net Coordinator Margie Currey/KA3PQP wishes to thank all those who served as net controllers for the 193 season, which according to her, was the best we have ever had. There were 16 full-time controllers and 9 subs. She promises to contact everyone in February to prepare for the 1994 boating season.

The October 21st program on CW by Tony Young/WA3YLO and Buck Watson/KC3Y was well received. Several attendees were inspired to check into the Maryland Slow Net (at 7:30 each and every day on 3.717 MHz).

Eleven AARC members reported to Southern High School at 7:15 AM on October 10th to provide communications for the Annapolis Striders 16-Miler through South County. At least 32 members and two XYLS were on hand to work the Chesapeake Appreciation Days on October 30th and 31st. The attendance was next to nothing due to the dismal, cold, rainy days but, as usual, the communication duties were performed well. A total of sixty-four messages were received from the public to be sent through the National Traffic System.

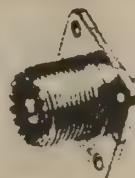
At the Clubhouse on October 9th Bob Israel/WC3I, Oscar Ramsey/NV3G and Charlie Tiemeyer/W3RMD gave 22 exams to 12 persons. Sixteen tests were passed with 9 upgrades. Bob Baltz/N3MNT and Harlan Ray/AA3FE graded. Bettye Tiemeyer/K3VRZ and Holly Bevan/N3BMB registered.

Congratulations to Gordon Amey/N3PXB who has upgraded to Advanced.

73, Holly/N3BMB

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**FAX 301-490-6141**



### **AMSAT The Radio Amateur Satellite Corporation**

- ◆ Meetings: Semi-Annual - January and July
- ◆ Local Net: Sunday at 9:00 p.m. on 146.835 MHz FM, W3ZM/R, Greenbelt, MD
- ◆ Information: Pat Kilroy-WD8LAQ (301) 249-3396 or on packet WD8LAQ @ WB3V.MD

### **AMATEUR SATELLITES ARE FUN!**

**MEETING TIME.** The next meeting of the local Radio Amateur Satellite Corporation (AMSAT) group has just been announced. You are invited to attend a gathering of local satellite enthusiasts on Sunday, January 16, 1994 at the NASA/Goddard Space Flight Center visitor's center auditorium. The entrance is located on Soil Conservation Service Road just north of Greenbelt Road in Greenbelt, Maryland.

Starting at 1 p.m., there will be informal talks and "show and tell" equipment demonstrations. You and your friends and family may come early for either a tour of the Goddard Space Flight Center in action (phone 301-286-8981 for details) or to see the public model rocket launches for the younger set. Topic items are wanted. Beginners are welcomed. Here is your chance to check out this exciting facet of our radio hobby!

**ALINS.** The AMSAT Launch Information Net Service (ALINS) was activated on the evening of September 26th for the Ariane V59 launch of several new OSCAR satellites. This special net meets to monitor the launch action of an amateur radio satellite and to gather telemetry of the "new-born" satellite and in turn supply amateur ground controllers with the prized data. Many thanks to WA3NAN, W5IU, W8GUS, N8AJD and KA3ZYX for acting as net control stations!

Many recent ALINS participants considered the V59 mission in Kourou, French Guiana as a dry run for the coming AMSAT Phase 3D launch. Check in to any of the AMSAT hf nets, as well as our local AMSAT vhf net on Sunday evenings on 2-meter FM, to find out how you can participate. All are invited to join the fun.

Best 73 es CUL, Pat Kilroy, WD8LAQ

### **Montgomery Amateur Radio Club**

- ◆ Meetings: 1st and 3rd Wednesdays of each month at 7:30 p.m., Executive Office Bldg. Montgomery Co. Government Center, 101 Monroe St., Rockville, MD Park underground on G-2.
- ◆ Repeater: 146.355 in (Rockville & Germantown) 146.995 out (Rockville)
- ◆ Mailing: M.A.R.C., P.O. Box 611, Gaithersburg, MD 20884-0611
- ◆ Information: Jeff Horlick - KZ3F (301) 258-0112, Steve Todd - K2IYQ (301) 253-4172
- ◆ Training: Jane Rosenthal - AA3CQ (301) 762-6262, Dick Hayman - K3DML 340-8251

### **MARC MEMBERS ELECT OFFICERS, LOOK TO 1994**

While Virginia's governor's race captured most of the media attention, a few members of the Montgomery Amateur Radio Club were campaigning for and being elected to club offices.

Al Rabassa--NW2M was re-elected to another term as president. Stan Staten--W3INK and Paul Kelner--KA3ORZ were on the ballot for the position of vice president; Staten was elected.

Nolan Crabb-N3PPD was elected as secretary, and John Uhrlaub--KA3QFL was re-elected as treasurer.

Club members elected its three-member board of directors from a slate of 11 candidates. The strong slate of capable and talented candidates meant voters faced some hard choices. In fact, a second round of balloting was necessary before all three winners could be named.

Jeff Horlick--KZ3F was re-elected to his board position in the first round of balloting. Ron Rubin--N3KQY and Don Smith--N3LHZ won in the second round. The eight other candidates for board positions were Mark Bary--N4EOC, Rick Burich--K3YNY, Dave Halliburton--WA3ZOR, Jim Horton--N3KTV, Allan Nathanson--WA3WCO,



Jeff Strandberg--WV3B, Matt Walther--N3LFZ, and Kathy Zabriski--N3PRU.

Prior to the November 3 election, candidates addressed MARC members gathered at the October 20 meeting. Rabassa expressed his appreciation for the opportunity to serve during the past year. "It's been a good year, and a challenging one," he said

Stan Staten--W3INK, the newly-elected vice president, warned voters prior to the election, "don't vote for me if you don't intend to help. If you vote for me, that means that you personally agree to do something during the year to help the club."

Nolan Crabb echoed the theme of others in his bid for club secretary. "This club, collectively and individually, has done a great deal for me," he said, "and I want very much to give something back-to be of greater service to the club."

Treasurer John Uhrlaub--KA3QF1, gave 10 reasons why he wanted to be treasurer again. "I'm a creature of habit," he quipped. "I've been doing this for six years, so why change now? Besides, it's an easier job than being president."

Ron Rubin--N3KQY, said he sought a board position because of the club's support for him. "There's a sense of comradeship that I feel for all the members of the club," he said. Don Smith--N3LHZ agreed with Ron Rubin. "Without MARC," he said, "I would not be a ham." Jeff Horlick--KZ3F said increased member participation, realistic goals, and expanded educational opportunities for members were among his goals for the new year. "I look forward to continuing on the board," he said.

In his state of the club address, President Al Rabassa--NW2M said he wants to involve more club members in activities and focus on additional training for new hams. Club meetings could change

in 1994, he said, alternating between business meetings and longer presentations. "I'd like to do an antenna-building party in the spring. I'd also like us to take a look at a south remote site for the MARC repeater to improve coverage in Virginia."

## HE'S OFF FOR SOME FUN IN THE SUN

It's probably still true that a picture's worth a thousand words. But for MARC Member Dick Hayman--K3DML, a picture's worth a trip to the Bahamas. Kenwood recently announced that it was looking for pictures of the most innovative and imaginative way to install one of its rigs in a car. Hayman, who had installed a Kenwood TS-50 in an Accura using a cellular phone mount, asked MARC Member Ken Nicoles--KD3VK to take some pictures of the installation. The pictures were sent to the folks at Kenwood; they thought highly enough of Hayman's installation to grant him the trip.

## ACKNOWLEDGMENTS

Special thanks to Ron Palenski--KD4ZLF, Tim Moses--N3MRF, and Don Smith--N3LHZ for their assistance with the FAR Fest in Gaithersburg in September. Thanks also to the 16 MARC volunteers who challenged the rain and cold on Halloween to help out with the Rockville fun run.

## CAPITOL CITY INTERNET SERVICE

NO-FRILLS, NO-MENUS INTERNET access

*telnet, ftp, gopher, wais, e-mail*

HAM RADIO CALLBOOK, PACKET RADIO

FLAT RATE \$20 703-448-4470



### **Metrovision Amateur TV Club FAST SCAN-COLOR-ATV**

- ◆ Meetings: Quarterly-. Call for next meeting time and place Repeater: WA9GVK/4 (video and audio) 425-431 MHz in; 438-444 MHz out. Also accessible on 144.970 simplex audio.
- ◆ On-the-air: Sundays(ATVNet)at 8:00P.M., Wednesdays (Ragchew) at 8:00 P.M.
- ◆ Mailing: Metrovision, Inc., P.O. Box 8231, Falls Church, Va., 22041
- ◆ Information: Sam - N3GHY (301) 630-3373, Dick - WB3EPX (301) 439-8135

It appears as thou Metrovision will not be having the twentieth anniversary dinner this year. The tentative plans now are for having the dinner sometime in early 1994. If there are any more changes to these plans, we will announce them here in Auto-Call.

We want to thank WA9GVK-Bruce, KA4CKI-Jim, and KB4QGJ-Gerald for the work that they did in getting our interference problem solved at the repeater site. While that particular problem was solved, we still are experiencing problems with packet interference.

Our friend and fellow member KO4OX-Tom, has recently raised a new antenna tower at his QTH down in Hartwood, Va. Tom has put forth a lot of effort to get out on ATV and it has paid off nicely. He has some of the best video on the repeater considering the fact that he lives the farthest away.

We now take the opportunity to wish our members and friends a very happy Hanukkah and a merry Christmas. We also wish everyone the best for 1994.

See you on ATV.

73 WB3EPX Dick

### **Maryland Mobileers Amateur Radio Club**

- ◆ Meeting: The First Friday of every Month at 7:30 p.m. The Location is the Office of Emergency Management at Crownsville State Hospital. Talk-in available on 146.805/449.125 Mhz.
- ◆ Repeaters: WA3PJQ - 146.805 and 449.125 Mhz.
- ◆ Weekly Net: Mondays on 146.805 at 8:30 p.m.
- ◆ Address: M.M.A.R.C. P.O. Box 935, Severn MD 21144-0935

Are you ready for the Holiday season? Got plans to pick up some great deals with all that Holiday money your gonna get? Well, don't forget about the Great First Annual MMARC Post-Holiday Hamfest on January 30th in Odenton.

You'll have to excuse the shortness of this column but I just purchased a new PC this week and I am still figuring out where everything is stored and how to do this and that.

The November MMARC meeting was another informative one. The presentation was on ARES and RACES and reminded me that I had not checked into the Maryland Slow Net for a while. Every night at 1930 local time on 3717. It's a great way to build up your code speed and learn message handling at the same time. Believe me, they will work with you at any speed and have some v-e-r-y patient instructors. I know this from personal experience. If you want more information, just tune in and listen, or catch me on the 146.805 repeater.

There was a lively discussion on how to cope with changes to the club's repeaters. I was reminded of a New England town meeting and was pleased to see all views considered and discussed. My compliments to our club's Technical crew, who has the pleasurable task of trying to please all the people all the time. We've all been in that position at some time or another, so we know "It ain't easy".

Have a great Holiday season, and spend some time enjoying what the holidays are really supposed to mean, and see you next month.

73, Bruce - N3BWF



## Ole Virginia Hams

- ◆ Meetings: Third Monday of each Month, 8:00 p.m., Northern Virginia Coop Bld., 10323 Lomond Dr. Manassas, VA.
- ◆ Repeater: Voice - WA4FPM 146.97 and 224.66, Packet Node: 145.030 and 223.540 (OVH) Packet BBS: 145.030 (BBSHRG)
- ◆ Net: Each Thursday, 8:00 p.m., 146.97 and 224.66
- ◆ Information: Harry Vorhauer-W4PVA (703)-368-6050, Steve Frick - N4OGR (703) 361-0008
- ◆ Mail Address: Ole Virginia Hams ARC, PO Box 1255, Manassas, VA 22110

A little OVH history- You probably know about the OVH Thursday night Bulletin (net) at 8:00pm on 146.970 and 224.660. You probably do not know: That the Ole Virginia Hams Bulletin number 1 occurred on March 16, 1978. It has been on every week since then with only one exception. Harry W4PVA has been conducting the bulletin since its beginning. As Harry tells it, his friends commented that he talked on the radio so much that perhaps he should conduct a net, so he did. Harry logs each check-in on 3x5 file cards and now has 4 boxes full of them. There have been a few times over the years where another ham has sat in for Harry when he could not conduct the net, but not many. Thanks Harry. Incidentally, Pete KB4RME "broadcasts" Amateur Radio Newslines for the bulletin and has been doing so for sometime now. Tune in on Thursday nights!

The first informal meetings of what would become the Ole Virginia Hams ARC occurred in 1958.

If you would like to attend an Ole Virginia Hams meeting the address and time is listed above but listen to the OVH net for the weeks proceeding the meeting. The reason is that our meeting place hosts at NOVEC are planning a room renovation and we don't yet know when or how long we will be meeting elsewhere. Harry W4PVA is looking into potential meeting places and will let everyone know the when and where as he gets the information. Don't let any of this stop you, come on out to

see us- visitors are always welcome.

## PUBLIC SERVICE

Several public service events have occurred this fall involving OVH hams including The Prince William County Fall Bike Tour on October 10th, Scout Jamboree-On-The-Air October 16-17, and the Marine Corps Marathon on October 24th. Butch W4HJL and Ron NV3S both hosted groups of Scouts in their homes for the Jamboree-On-The-Air. The word is that the scouts (and the Hams) enjoyed their day. About the time you read this the OVH VEC December testing session will have occurred. Details regarding the turn out etc will appear here in a later column.

## HAMFEST

Early OVH Hamfest details are now underway. The hamfest victim (I mean chairman) for 1994 is Jim N3ODZ. The co-chairman is Jack N4YIC. These two gentlemen both volunteered with much enthusiasm. It took absolutely no pleading, begging, bribing, or threatening to get these two guys to step forward for this assignment! But seriously folks, the Manassas Hamfest is June 5th, 1994 - mark your calendars. Further OVH hamfest info will be supplied here as it is provided. Our publicity chairman Ken KM4UH is working on some of the early details now.

The Ole Virginia Hams have recently welcomed the following new members:

Steve WA3RKM  
Patrick KE4FMY  
Maureen KE4GSZ (YL of Jay NS5N)  
Scott KE4HCT  
John NQ4Q  
Calvin KE4TKH  
Mike N5OJM

Rumor has it that the open position of refreshment chairman will be filled by one (or more) of the new members listed above...

## 10-10 NET

The American Eagle Chapter 10-10 net has resumed. A meeting was held in Manassas on October 30 to kick off the resumption of the net. It was decided to conduct the net on Sundays at 1:00pm EST on 28.340Mhz. The first net was conducted on Halloween with check-ins from Jim WD4OJY, Milt N4SN, John N4YOB, and yours truly. Get that 10-10 number and join in on a Sunday!

Alan, KD4KBX



**The Middle Atlantic  
FM & Repeater Council**  
Frequency Coordinating Committee  
P.O. Box 1022  
Savage, Maryland 20763-1022

On Sunday, October 24, 1993, The Middle Atlantic FM and Repeater Council (T-MARC) general membership selected officers for the 1993-1994 term. Elected were Owen Wormser, K6LEW, President, W. Van Aller, K3CZ, Vice President for Technical Operations (and chairman of the Frequency Coordinating Committee), Henry Black, N3ESR, Vice President for Public Relations (re-elected), John Hengen, K3HOI, Secretary/Treasurer, and John Sichert, KA3LAO (re-elected), Sandy Sanders, WB5MMB (re-elected), and Ross Merlin, WA2WDT, Directors of the Board.

For the outgoing officers and director of the T-MARC organization, the membership expressed their appreciation and sincere thanks for the group's work over the last few years. Great appreciation and heartfelt thanks was accorded departing Frequency Coordinating Committee Secretary Gary Hendrickson, W3DTN, who after many years of faithful and devoted service to the organization has decided to "retire." Again, Gary, thanks for a job well done. Thanks also for representing T-MARC at the "President's Seminar" in Annapolis, Maryland, hosted by the new MDC ARRL Section Manager Bill Howard, WB3V.

Less than a day after the Annual T-MARC meeting and elections, new president Owen Wormser, K6LEW, drafted his letter "from the Desk of the President." In the past the V.P. for Public Relations has submitted material to this magazine regarding frequency coordinations, reminders on policies, proposed changes, and other items of interest to repeater users, sponsors, trustees, and the amateur community, *AutoCall* readers will see some of what is "...on the president's desk" whose letter follows.

"Dear fellow amateur: As the new President of T-MARC, I would like to introduce myself to you and your organization. First licensed in 1952 as K6LEW, I have been active in amateur radio ever since. My interests focus mainly in VHF and above (EME and tropo) and I enjoy operating HF mobile. I currently own two repeaters in the McLean, Virginia area and I am in a partnership in a third also in McLean.

"In addition to this brief introduction, I am writing also to request your input about matters which are creating serious challenges for all present and would-be repeater sponsors. There are no further two-meter, 600 KHz-split, repeater pairs available in the Baltimore/Annapolis/Washington D.C. metropolitan corridor at this time. T-MARC considered additional, alternative two-meter band-plan splits at its 24 October 1993 Annual General Membership Meet-

ing. It was confirmed by all in attendance that T-MARC will continue its policy of coordinating only 600 KHz-split frequencies in accordance with the ARRL Band Plan.

"T-MARC will continue to monitor and document 24-hour activity of all two-meter coordinated repeaters and will make such information available to anyone desiring to request a frequency pair for repeater operation in the Baltimore/Annapolis/Washington D.C. metropolitan corridor. T-MARC will continue its policy, agreed to by a majority of T-MARC members present at the October 1993 meeting, to wit: For those frequency pairs not demonstrating substantial activity as described in T-MARC policy documents, T-MARC may notify the appropriate sponsor of record, accountable for the coordinated frequency pair(s) in question, that frequency pair(s) is (are) subject to possible multiple occupancy based on usage level analysis.

"For those desiring new two-meter frequency pair(s) in the Baltimore/Annapolis/Washington D.C. metropolitan corridor, the following new policies were adopted at the 24 October 1993 Annual T-MARC General Membership Meeting:

- ° "Regular Coordination": All applicants for two-meter repeaters in the Baltimore/Annapolis/Washington D.C. metropolitan corridor will be placed on a waiting list. The T-MARC articles in *AutoCall* magazine will be used to show each month's progress toward coordinating as many requests as feasible. Applicants will be notified by mail just as soon as their request is coordinated. Alternatively, applicants may contact the T-MARC President for status. This change to T-MARC policy means that our former procedures associated with the "Builder's Channel" will no longer apply for two-meters in the defined area of the Baltimore/Annapolis/Washington D.C. metropolitan corridor. T-MARC's established "Builder's Channel" policy remains in effect for experimental two-meter repeater operations in areas well outside this corridor.

- ° "Self Coordination": Redefined in T-MARC policy papers as pertaining specifically to two-meters. (Available by sending a self-address stamped envelope to the address at the head of this article. Request the "Self Coordination Policy.")

- ° "Shared, non-protected" (SNP): SNP was previously described as the "Builder's Channel" concept, which has been discontinued effective 24 October 1993. The frequency pair of 144.57/145.17 MHz will not have T-MARC's endorsement for use as in the past, but will be available for those potential sponsors desiring to "evaluate and test" their equipment on a temporary basis while on the T-MARC waiting list. Coded access or use of PL is strongly encouraged as there may be several repeaters operational on this frequency pair in any given service area.

"T-MARC requests all owner/operators of two-meter



repeaters in the Baltimore/Annapolis/Washington D.C. metropolitan corridor to evaluate their continued need for their frequency pairs and advise T-MARC if they wish to relinquish their coordination so other applicants may have a chance to put their repeaters on the air.

"As a reminder, T-MARC is an association of individuals and groups who use the VHF and UHF spectrum for amateur radio repeater service. T-MARC has, as its primary purpose, the task of coordinating such activities throughout Delaware, Maryland, the District of Columbia, Northern Virginia, and the eastern panhandle of West Virginia in an effort to make maximum possible use of available spectrum with minimum harmful interference. This is a 100% volunteer effort relying on the professional skills and after-hours efforts of a "dedicated few" in the service of us all who use repeaters.

"Your continued support is essential as we move forward into a new century in amateur radio history, coupled with ever decreasing resources. We need your views, comments, concerns, and kudos whenever possible. Please feel free to write or call any T-MARC Officer or me at any time if we can be of assistance. Your cooperation and continued support of T-MARC goals and objectives is greatly appreciated. Thank you for your time and consideration.

"Sincerely, Owen Wormser, K6LEW,  
President, T-MARC."

Correspondence for Owen can be sent to the following:

Written: 406 North Pitt Street  
Alexandria, VA 22314-2316  
Voice: (703) 684-7682  
FAX: (703) 684-1382

In other activities, T-MARC re-coordinated in May of this year K3UMV's 147.375 MHz repeater to its new location at Hagerstown, Maryland. During this same period at the request of the sponsor, the Frequency Coordinating Committee re-coordinated N3JCR's 224.62 MHz repeater at Newark, Delaware, onto 224.72 MHz, due to interference problems from New Jersey. N3CNJ's 147.120 and 449.255 MHz repeaters were re-coordinated to a new location at Whiteford, in north-central Maryland. Also, re-coordinated was the Central Maryland Repeater Group's 444.700 repeater to a new location in Bowie, Maryland.

In June 1993, the committee coordinated a proposed new 52.15/53.15 MHz repeater to N3GXH at Randallstown, Maryland, west of Baltimore. The committee re-coordinated the Southern Patuxent A.R.C.'s 443.300 MHz repeater to a new location in St. Leonard, Maryland.

For the month of July, the committee coordinated several items starting with the proposed new 29.520-in/29.620-out MHz repeater at Mechanicsville, Maryland, to the Southern Patuxent A.R.C. To the Newington A.R.C. in Lorton, Virginia, the committee coordinated a proposed new 443.675-in/448.675-out MHz repeater. Coordination was approved for a proposed new ATV repeater in Baltimore to the Chesapeake Amateur Television Society (CATS) on 1265 MHz-in/923 MHz-out. Also they coordinated a proposed new 144.950 MHz in/out "replexer" to link into their ATV repeater's audio channel. The Columbia A.R.A.'s 147.390 MHz repeater was re-coordinated to a new location in Columbia, Maryland. The committee coordinated some new UHF link frequencies for the AMRAD's McLean, Virginia, 147.210 MHz repeater, and to N3HIA's 224.480 MHz repeater in Baltimore.

Other July coordinations included the request of the sponsor to have T-MARC cancel coordination of WA5ZAI's 444.500 MHz repeater in Alexandria, Virginia. With his move to Texas, the committee wishes Hoss the best in his retirement. To WA3TAI at Accokeek, Maryland, coordination was granted for a proposed new 449.500 MHz-in/444.500 MHz-out repeater. A pair of UHF frequencies were coordinated for "remote-base" use to KA3BTD in southern Maryland. After receiving no replies to several status inquiries, T-MARC canceled the coordination of K3SP's proposed 146.820 MHz repeater in Cockeysville and his 29.520/29.620 MHz repeater at Freeland, Maryland.

In August the Frequency Coordinating Committee granted coordination of a new 146.805 MHz repeater to Garrett County ARES on Eagle Rock Mountain in Garrett County in Western Maryland. Re-coordination was approved for the Alexandria Radio Club's 53.14 MHz repeater transmitter to a new, improved site in Alexandria, Virginia. A six-month conditional coordination was issued to the Arlington Radio Public Service Club's 146.625 MHz repeater at Arlington, Virginia, and to K4IWF's 147.270 MHz repeater at its new location in Germantown, Maryland. At the end of period, a review will be made of any received, documented interference of neighboring repeater systems. At the request of the sponsors, the coordinations of the 442.750 MHz repeater in northeastern Maryland and of the 442.250 MHz repeater at Wilmington, Delaware were canceled.

Coordinations in September included the proposed new 449.475 MHz repeater to the Columbia A.R.A. at Columbia, the proposed new 449.875 MHz repeater to the Sussex, A.R.A. at Millsboro, in southeastern Delaware, and a 440 MHz frequency pair to a group in Laurel, Maryland area for "remote-base" operation. The Southern Patuxent A.R.C. was given re-coordination for one of its 147.195 MHz repeater's remote receivers to a new, improved location.

In October, the Frequency Coordinating Committee re-coordinated WA3UTC's 224.120 MHz and 449.425 MHz



## National Capitol DX Association

- ♦ Meetings: Irregular, Contact the Secretary for information
- ♦ On-The-Air: Every Sunday at 8:30 p.m. on 147.00. All are welcome
- ♦ Information: Rick Murphy-WA1SPT (703) 280-2637

NCDXA member Larry Vogt, N4VA, is now in Taiwan for a while. So listen for BV/N4VA. Larry hopes also to go back to Bangladesh and perhaps will be able to operate from that location. Other plans (other than business activities) include possibility joining the crew going to Pratas Island to try and activate the island as a new DXCC country.

Another NCDXA member on the move includes long time NCDXA member Nancy Draheim, NK4U, who will be moving to Georgia in the near future. Now we'll have to find a new location for our June meetings. Nancy also served for many years as the coordinator of the Fourth Call Area QSL bureau (two-letter prefix section). So many of you out there owe Nancy and the Sterling Park Amateur Radio Club a round of applause for the great work. Nancy, we're going to miss seeing you preside over the QSL Bureau tables at the local hamfests. Nancy has also been the coordinator/point of contact/information source for the Volunteer Examiner Cooperative.

Other happenings: Don Search, W3AZD, is settling in to his Ft. Lauderdale, FL QTH but still manages to make every NCDXA meeting. By now, Don should have his new R-7 up and well tested. Brian Bayus, N1KCE, and Ron Rubin, N3KQY, both jumped into RTTY operations during the September contest. Now Wayne Wilson, N3UN, and the other RTTY DXers will have some company in digital country. Actually, this is a good place to point out that now almost all DXpeditions and many hams going to some DX location for a contest take along RTTY gear. If you haven't tried this mode for DXing, you might want to consider it.

73 & Good DX, Leo, KA3TGY

## EDITORS NOTE:

Once again I must remind everyone of our deadline. It seems that with each passing month I am receiving articles from Clubs and Shack Sale items later and later. (I received a few that were post marked November 10th.) Unfortunately they will not make it in this issue. Please remember that our deadline is the 5th of the month prior to the month of publication. If you want you information published in the January issue I must have it by December the 5th. If your information does not appear in the issue you wanted it to, it was probably received after the 5th.

Listed below are a few things that you should include when submitting Club columns and Shack Sale items for publication.

1. Name
2. Address
3. Phone Number
4. Callsign
5. Month to be published

Please print clearly (Notice I Said Print). I have a hard time reading some hand writing.

Mail your information prior to the 5th. of the month. The best thing to do is to try to have your material in the mail by the 1st. of the month.....

REMEMBER - This is your Magazine, Take Pride in your Participation

Doug Allen, Editor

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*T-MARC - Continued from page 38*

repeaters from Hampstead to a new location at Towson, Maryland. The committee coordinated a proposed new 52.23/53.23 MHz repeater on Bull Run Mountain, near Manassas, Virginia to WB4DRI. Also, coordinated a proposed new 443.075/448.075 MHz repeater at Essex, east of Baltimore, Maryland, to KA3ZAN. A new control frequency was coordinated to the Cecil County R.A.'s repeater at Elkton, Maryland.



## TRI-COUNTY AMATEUR RADIO CLUB

- ♦ Meetings: Semi-Annual Business meetings, Time and Date announced on the air and in Club Newsletter
- ♦ Repeater: KA3LAQ/R 147.780 MHz
- ♦ On-The-Air: Tuesdays at 19:30 Hrs. (Local Time) Amateur Radio News Line Tuesdays at 19:15 Hrs. (Local Time)
- ♦ Mailing: P.O. Box 10592, Sliver Spring, MD 20914

It is hard to believe that the summer is now behind us and the holidays are just ahead. Tri-County has had a busy year and we look forward to 1994 for more enhancements to the repeater system along with more of those enjoyable social events.

As you may know by now, we had to cancel the WinterFest hamfest for this year due to circumstances well beyond our control. Even though we were not able to pull it off this year, watch for us next year at the same time!

For those of you who had been listening on Sunday evenings for the inter-state net of linked repeaters and recently found silence, there have been some interesting developments. It would appear that the main hub repeater location at Mt. Union, Pennsylvania abruptly shut down recently, killing not only the Maryland link but most of the Pennsylvania system. The Chesapeake (Maryland) system is still operational but there is no one up there to talk to at the moment. When things get cleared up we should be back up and running. Nevertheless, work continues on the intra-Maryland Chesapeake system. Keep listening on the repeater for late breaking news.

**Heard On The Repeater:** This feature of our report attempts to provide useful suggestions for efficient and effective use of the repeater:

° Tri-County has a number of new members who may not be aware of the initial key-up time delay. After the repeater has been off the air for a

short period, an input delay is activated. This means that when you initially key the repeater up pause a second for the controller to recognize that you are a legitimate signal and not noise. If you start to speak immediately, the first part of the call will be chopped off. If you hear someone who encounters this situation, just remind them of this noise reduction feature.

° A number of folks are forgetting to identify themselves when using the repeater. While the rules have changed from what the "old-timers" remember, you still need to ensure that all communications the parties are properly identified. This applies to the autopatch also. Make use that you identify before and after each use.

The Tri-County family would like to extend to each of you our sincerest wishes for a safe and pleasant holiday season. We will see you all again "next year".

Don't forget the Tri-County on-the-air net which meets each Tuesday at 1930 local. If you are listening at 1915 you will hear the latest NewsLine information, ARRL bulletins, ARRL propagation forecasts, and the latest exam schedules throughout the area. NewsLine is an amateur radio news service from California which always has information of interest to the amateur community.

Greg - WA3FSC

Orders and Inquiries  
5-9 PM EST  
(301) 963-7752

Help Line  
8-9 PM EST  
(301) 869-6436

### PACKET GADGETS

*"Connect with GADGETS!"*

Ken Ramirez - KH2F  
9404 Rushmore Ct  
Gaithersburg, MD 20879

AEA • PacComm • DRSI



## Woodbridge Wireless, Inc.

- ♦ Meetings: 2nd Tuesday of each Month at 7:30 p.m., Canteberry Woods
- ♦ Repeater: WB4FQR/R 147.84/24 and 449.9/444.9 WB4GJZ/R 223.18/78
- ♦ Nets: Mondays at 8:00 p.m. Local (0100 UTC) 147.84, 223.18 (The Repeaters are linked for the Net) Wednesdays, Slow CW at 8:00 p.m. 21.164 MHz. Saturdays 9:00 p.m. - in 10 meter Novice Band 28.460 MHz. SSB
- ♦ Mailing: P.O. Box 112, Woodbridge, VA 22194

At the October meeting the Woodbridge Wireless elected a new slate of officers for '94. They are: President—Ed Quinto, KD4KBT; VP—Bill O'Mara, WB4RMJ; Secretary—Jim Duffer, WD4AIR; Treasurer—Ed Bayne, N4LJZ; Activities—Bob Tyson, KD4PUR. The Board of Directors includes Stu Mitchel, WA0DYJ; Loyd Davis, K8EI; and Jim Neff, WJ4M. Congratulations and best wishes for the next year.

A check of the last QST reveals our Field Day effort netted a 1st place in 8A. That caps off an event that was fun and a well-attended club activity. WWI has a pretty good Field Day plan, one we repeat each year. Practice makes perfect...but good propagation and good antennas help a lot too.

The club again provided communications help for the Head of the Occoquan rowing race. This Fall event is either a wrap-up of the year's rowing activity or a prelude to April's schedule... however you view it. Bob, NQ4K, Michelle, N4UBM, Loyd, K8EI and other WWI-ers have been regulars. They'll be needing help this Spring.

The Boy Scouts Jamboree on the Air (JOTA) provided another opportunity for WWI-ers. Denis, WD4KXB; Cliff, KO4FM; Mike, KA4RRU; Brad, KE4BUX; Tom, AC4XT; Bob, KD4PUR and Kurt, K5JIX organized the day's activities aided by scouts Ross, KE4BUY and Phil,

KE4EVB. Ross and Phil participated in last year's JOTA and earned their ham licenses during the ensuing year. The activity included two HF stations and one VHF station. The bands were open throughout the US and to Europe and Russia. The 23 scouts who attended worked on their Radio merit badges by making contacts and building a code oscillator from scratch. Hopefully we'll see a new crop of Scout Amateurs for the next JOTA.

The emergency vehicle has been painted (it's white and is lovingly referred to as the big, mobile refrigerator). Saturday the 6th of October is a work day to start on the interior.

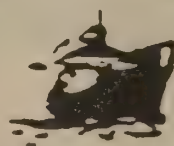
The October meeting will see the budget discussed. The vehicle has added some expenses to our usual annual costs and a dues increase is being considered. However...a quick count of regular repeater users who don't support the club reveals that the normal dues would more than pay for the increase if all WWI repeater regulars supported the club.

The Holiday Party Committee reports only 2 tickets remain for the party December 4th at the Pilot House Restaurant. The party is usually the site of the December monthly meeting...the second Tuesday in December meeting is dispensed with.

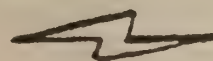
Well, that's it from Eastern Prince William County. Remember to support your local repeater group. Those things don't keep going for free and your help will be greatly appreciated.

73 de WJ4M

Chapter X



*Society*



*of Wireless Pioneers*

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## Leisure World Amateur Radio Club

- ♦ Meetings: Second Tuesday of each month, 2:00pm, Clubhouse I, Leisure World, 3700 Rossmoor Blvd., Silver Spring, MD 20906
- ♦ Net: Monday, 7:00pm, 144.650/145.250 Rock Creek ARC Repeater
- ♦ Information: Bob Beck, (301) 598-6277

Our officers for this year are: President Bob Beck, KA3IHQ; Vice President Arch Arcilesi, W3WUR; Secretary Paul Hoffman, K3CKK; Treasurer David Gleason, K3OBK; Technical Director Frank Blasdel, NN3B; Public Information Officer Bud Thompson, N0AA.

Public service activities this year include assistance with the Fourth of July Parade and three Walk-A-Thons.

The Club antennas were upgraded during the past year to include 80 through 10 and 2 meters.

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**TNX es 73 de Kevin, N2KXX - Pres.**

## Mount Vernon Amateur Radio Club

- ♦ Meetings: Second Thursday of each month, 7:30 p.m. (except December) Mt. Vernon Governmental Center 2511 Parker's Lane, Alexandria, VA 22308
- ♦ Repeater: WD4PDP/R 146.055 input 146.655 output
- ♦ Nets: Every Tuesday at 9:00 p.m.- Starts on 2-meter then moves to 10-meter on 28.405
- ♦ Information: John KI4HK, (703) 780-2882 or Julie KD4WSZ, (703) 799-9466
- ♦ Training Classes: John Forrest WZ4A, (703) 971-3905
- ♦ Testing: Second Saturday of each month, 9:00 a.m. Robert E. Lee RECenter in Lee District Park 6601 Telegraph Rd., Alexandria, VA 22310
- ♦ Mailing Address: Mt. Vernon Amateur Radio Club (MVARC) c/o Frank Mackey N4GUS P.O. BOX 7234 Alexandria, VA 22307

MVARC has activated an ARES phone tree. If you are on the ARES roster, expect a call. The phone tree format is in the October 1993 Ye Olde RF Output newsletter, or call Steve WB4EEA (703) 780-7248.

The fall classes are winding down and soon we will have several newly licensed HAMS. Welcome and congratulations! Classes will start in January 1994, Monday evenings, 7:30-9:30 pm. for FCC General, Advanced and Extra. Call John Forrest WZ4A (703) 971-3905.

At the September meeting we enjoyed welcoming: Robert A. Blackie KC4ZIY, Joe Carr K4IPV and Tom Abernethy WA3TAI who then became a member the same night. Other new members included John W. Hoffman KAOGDI, Bill Fleming KE4BLU, and Richard Marks Jr. KB4YHO. Glad to have you with us.

In September, our guest, Joe Carr K4IPV spoke about how to write and submit an article to the various HAM magazines and what to expect



## Mid-Atlantic DX & Repeater Association - MADRA

- ◆ Meetings: Second Thursday of each month at an area restaurant. Call 301-416-4887 for location.
- ◆ Repeaters: 147.3451147.06, 448.125, 224.20, 224.28
- ◆ Swapnet: Tuesdays 7:30 pm on 147.345
- ◆ Voice Mail - For club info, hamfest calendar and other ham-related news call 301-416-4887
- ◆ Information - The Mid-Atlantic DX & Repeater Association, 230 North Potomac Street, Hagerstown, Md. 21740

MADRA got on board with other area hams as Roy, N2CSO put out a call for hams to help with the Brunswick "Railroad Days." in Brunswick, Md. Thanks to Sam-N3MPE, Jim-KA3SDM, Shawn-N6REP and Mike WB8VBW for helping with MADRA's special events station. The day provided a great opportunity to demonstrate amateur radio to the public as well as provide valuable public service.

On October 16 - 17, MADRA participated in the Boy Scout's 'Jamboree On the Air'. Club members made their ham shacks available to area scouts who wanted to participate in the weekend HF contest.

Starting in October, Madras SWAPNET hit the air. If you have ham gear you want to buy, sell or trade or if you would just like to say "hi", check in on 147.345 at 7:30 pm each Tuesday.

73, Dave - KD3XO

### AUTO-CALL MAGAZINE EDITOR

Doug Allen, N3FHM  
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Pasadena, MD 21122  
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*MVARC - Continued from page 42*

concerning the possibility of publication. The realities. Joe writes 'Carr's Corner' in 73 Magazine.

The October meeting was planned as a social event - to mix, mingle, and meet. Thank you to all our guests for coming: family, friends, current students. John K2VPR deserves special applause for bringing a cake and other goodies.

MVARC Apparel Purchases: hats, tee shirts, sweat shirts, jackets, etc. Call Steve WB4EEA (703) 780-7248.

Monthly Testing, code and written, is at Lee District Park in Alexandria, second Saturday of every month. No charge and walk-ins are welcome. Information is available by calling Frank N4GUS at (703) 455-1510. Also, call Frank if you are interested in being a VE or helping at the exams. You don't have to be a VE to help out and the more the merrier. Please arrive between 9 and 10 a.m. for testing.

MVARC's Next Meeting: December 09, which just happens to be MVARC's annual Christmas Party. Call Mindy WQ9Q for details; price, location, reservations, grab bag, attire, etc. (703) 519-0387.

Julie, KD4WSZ



## Culpeper Amateur Radio Association

- ♦ Meetings: Third Monday of each month, 7:30 p.m., Culpeper County Courthouse Supr. meeting room, Culpeper, VA
- ♦ Repeaters: Voice AA4VI 147.12
- ♦ Packet Node 145.79 (IPEPER)
- ♦ Packet BBS 145.79 (CULBBS)
- ♦ Nets: Tues. and Thurs. 8 p.m. 147.12
- ♦ Information: Gary, WOQDP (703)-854-6187

The first TCP/IP Jump-Start Seminar conducted by Bob Searest, KD4PWU was held on Sept. 18 in Culpeper- It was a resounding success, with over twenty attendees. Bob has been requested to present the seminar again by the Charlottesville club on the 4th. of December. CARA members who missed the first seminar please contact Bob if you wish to attend the upcoming seminar in Charlottesville.

Thanks to Bob, KD4PWU, Gary, WOQDP, and Jay, N4CBK, progress continues on the Regional TCP/IP backbone project with the installation of antenna and equipment at the Blakey Ridge site.

Packet node "IPEPER" and our LAN server "CULBBS" have been nearly 100 per cent operational, only down due to commercial power outages.

CARA members enjoyed their annual picnic in September in spite of some rainy weather. It was held at Mountain Run Lake Park located just west of Culpeper, Virginia.

On October 16th. CARA members participated in the "Boy Scout Jamboree on the Air." A mini field day operation was set up at a farm near Culpeper- Both H.F. and VHF were operational including a "Packet" station. The Scouts proved to be eager operators and enjoyed "rag chewing" on the phone bands. Hopefully, some may become future "Hams."

Welcome aboard to three new members at the October meeting. KD4JLY, Curt, KD4LIN, Paul, and KB3XY, Jon. These new folks will no doubt bring additional expertise and ideas to the club.

On "National Exam Day", October 30th. CARA VEC'S joined with VEC's from the Fredericksburg area to conduct examinations at Germanna Community College located midway between Culpeper and Fredericksburg on Rte. 3. In spite of Saturday being a nasty rainy day, fourteen exams were administered. Next examinations in the Culpeper area will be on December 10th. at the Piedmont Vocational School on Rte. 15 south of Culpeper.

Our November meeting will see the election of club officers for 1994, details for the annual Christmas dinner meeting, and an interesting program by Curt M. Nellis, KD4JLY, regional coordinator for the department of emergency services.

73 WD4OKD

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## Shenandoah Valley ARA

- ♦ Meetings: The first and third Friday of each month at 7:30 PM
- ♦ Place: The Collins Building 2129 Grace Street Winchester VA
- ♦ Repeater: 146.22/82
- ♦ Net: SVEN Each Evening at 7:15 PM 146-22/82
- ♦ Club Address: P.O. Box 139 Winchester VA 22602
- ♦ Information: Alan Moeck WA2RPX 869-1117

The membership of SVARC have elected their officers for 1994

They are:

President: Irv Barb KD4BHV

V-President: Rick Choy N4HXT

Secretary: Alan Moeck WA2RPX

Treasurer: Rikk Randal KD4HRI

Trustee: George Ritter W4UGX

Trustee: Jack Weaver WB4SXJ

Trustee: Olin Stultz WA40YD

The club is in good hands as these officers are all well qualified for the office which they have been elected.

The club annual picnic was held last month at the clubhouse. Mike N4PMQ was the cook assisted by Lorrie KC4JSM, Mike cooked several batches of his potatoes which he had some fool name for which I cant remember. Rumor has it that he cooks them in possum fat which is what makes them so special. The food was great, the fellowship was great. It was next to impossible to get a count as people were moving about, but the best one I could get was 73 attending.

This year we did something different, we made our picnic into a "mini hamfest" and technical presentations. The weather did not cooperate for any outside activities but, Rick Choy N4HXT did a demo on "Simon" Simon is a school bus monitor that has been converted to a VHF monitor with

several additions. Royce W3CSG and Les WB4D did a hands on demo on packet operation. "How does your HT sound" by Sam KD4LSX. John KC4YMR did a demo on equipment for the 10 chz beacon or voice. Sam WA4GOU did a demo on the "Spectrum Analyzer". Bill KD4JBY "How to get started in ATV" a very full day and something for anyone. The club is blessed with having three buildings which all was used, one for the cooks another for the picnic and the main building for the demos. Thanks go out to all who helped on this event. A very special thanks to Irv KD4BHV for his help.

Speaking of events, we have been involved in several recently. The "Walktoberfest" held in October, Fred W4KRT put together a group for this walk. Then we supported the Steeplechase races in New Market a week or two later with Jerry W6IHG leading this group. Just this weekend in Fort Valley, Irv KD4BHV took his motor home for this three day 50/50/50 he and Jane KD4IET acted as net control from his motor home for the entire event.

Guy W4PSJ cour training director is in the last week of a training class. I am told that after Guys class is concluded Alan WA2RPX will hold a "Upgrade Workshop" for three weeks this workshop will be for all classes.

In our continuous effort to train SKYWARN spotters and support SKYWARN. The club will sponsor a skywarn class on December 4 in Winchester. For more details contact Sean McClanahan WD4RPV 869-4374 or Fred Wetzel W4KRT 678-0394. The class will be Basic 1 from 9 AM-till noon. Winter storm 1 PM to 3:30 PM. With Melonie Hall as instructor.

73 Walt WA4HVV



### Rock Creek Amateur Radio Association

- ♦ Meetings: 3rd Friday of each month at 7:30 PM. VITRO Corp. Bldg #4, 13900 Connecticut Ave., Silver Spring, MD
- ♦ Repeater: W3RCN, 145.25/144.65 in Rockville, MD
- ♦ Weekly Net: Monday at 8 PM on the repeater
- ♦ Alumni Net: Monday at 10:45 AM on 7.230 Mhz(+/- QRM)
- ♦ Luncheon: Each Wednesday at 11:00 AM at the Anchor Inn in Wheaton, MD
- ♦ Address: P.O. Box 1913, Silver Spring, MD 20915
- ♦ Information: Leo Boberschmidt - KA3TGY (301) 946-3738 or KA3TGY@N3BBF.MD.USA.NA

REMINDER: There will NOT be an RCARA meeting this month. The next meeting will be on January 21st.

The October meeting featured an excellent talk by Mike Martin, Interference Investigator at PEPCO. Mike gave a great talk, illustrated by some really interesting slides. PEPCO is one of the few electric utilities that has a full time interference investigator. Mike has been a help to many hams in the area in locating sources of outside RFI. A few points of interest from Mike's presentation: if the RFI is coming from PEPCO equipment, it is almost always caused by arcing at some connector and NOT from the transformer; many times an RFI source thought to be PEPCO equipment turns out to be something inside a person's house - inside culprits include aquarium heaters and loose or corroded connectors at electrical service boxes. If you are having an RFI problem, give Mike a call at (202) 388-2249. Mike said he is ready to field any calls and PEPCO is to be congratulated for supporting such a service. If you are looking for an interesting program for one of your club's meetings, give Mike a call at the same number.

Club News: Carl-N3CFA has a new R-7 added to his antenna farm and had a chance to put it through its paces during the recent CQWW con-

### Green Mountain Repeater Assn.

- ♦ Meetings: Board of Directors, Last Month of each Month
- ♦ Repeaters: KD3VR-146.61(Cheverly) K3GXF-146.88 (Greenbelt)
- ♦ Luncheon: First Saturday of each month at the Fountain Cafe, in the Laurel Shopping Center Mall, U.S. Rt. 1 (Baltimore Ave.) and Cherry Lane. Starts at 11:30am
- ♦ Mailing: GMRA, P.O. Box 429, Riverdale, MD 20737
- ♦ Information: Boyd Nelson - KZ3Z (301) 434-0934

GMRA would like to express it's sorrow to the Family and many friends of one of it's members who became a Silent Key in October. N3JKC, Jim, as he was known to his friends in Ham Radio, passed away suddenly on Monday, Oct. 18, 1993 around 5:00 a.m. Jim's full name was James R. Hoffman and he and his wonderful wife, Theresa, resided in Colmar Manor, MD.

Two of Jim's passions were radio and music. He had been in radio and electronics for many years. He held at one time, a commercial radio operator's license. For many years he kept two way radio's operating for the Taxi companies in the Metropolitan area. He also worked on radios for his many friends. Music was also very important to Jim and over the years he had played with many of Country Music's top recording stars.

*Continued on next page*

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#### RCARA - Continued

test the end of October. Mike-NQ3V (the club treasurer) is back from a business trip to Alma Atta, capital of Kazakhstan and we hope to have him give a presentation about his experiences at one of our meetings. The DXCC backlog has definitely been cleared at ARRL: Leo-KA3TGY and Sharyn-KA3DOF had recent DXCC endorsement submissions processed and back in less than three weeks from mailing the QSLs to Newington.

73, Leo-KA3TGY@N3BBF.MD.USA.NA



## Prince George's Wireless Assn.

- ♦ Meetings: First working Tuesday of each month, 7:30 p.m., American Red Cross Service Building, 6206 Belcrest Rd., Hyattsville, MD 20782
- ♦ Club Station: K3CEZ
- ♦ Mailing: 4109 Kennedy Street, Hyattsville, MD 20781
- ♦ Information: Frank Holton, WA3ZMW (301) 927-1245

PGWA held it's regular meeting on November 2, 1993. After the regular business, an ARRL Video, Packet Radio Primer, was shown. Frank, our President, WA3ZMW brought it to the meeting along with his VCR and T.V.

Since receiving the IBM computer from the Red Cross, PGWA is planning to set up a packet station at K3CEZ's Radio Shack. Frank ordered an MFJ 1278B Multi-Mode TNC and the 1289 Multi-Com accessory for his own use but will try it out at the Club Station.

On October 16, 1993, PGWA held an (SET) Simulated Emergency Test with Dan, W3SWD as net control. Dan operated from our Club Station, K3CEZ located in Hyattsville Chapter Red Cross Bldg. The Disaster Control Director, Ms. Audrey Bell was sending messages over intercom to the radio room and Dan in turn would transmit them to the disaster site and the shelter site.

Ken, N3HLY was operating from the shelter site and he was privileged to have along Kathy Orhelein as an observer trainee. Kathy was very helpful with sorting the messages and keeping Ken informed. Kathy was waiting on her new Amateur Radio License, which I understand came last week. Her new call is N3QPO. Congratulations Kathy and we hope you will join us at the Club.

PGWA is discussing seriously, in adding a packet station along with our existing HF and VHF systems. We would like to thank all those who participated in the SET exercise. Frank WA3ZMW,

Dan W3SWD, Charles KA3COT, Tom N3BEO, Jim N3HPZ, Kathy N3QPO, Ken N3HLY, and a special thanks to Audrey Bell who was the Disaster Control Director, she directed the exercise. A critique followed the SET and met with over-all approval. Happy Holidays to all and 73's.

Ken Easton, N3HLY

## IMPORTANT NOTICE !

**Your Club Column's, Articles and Shack Sale Items are very important to us at Auto-Call Magazine.**

**Your submissions for publication MUST be received by the 5th of the month prior to the month of publication.**

**EXAMPLE: Your item must be received by the 5th of January to be published in the February edition of Auto-Call Magazine.**

**If your submission is received after the 5th of the month prior to the month of publication it will be held until the following months issue.**

**This MUST be strictly enforced in order to meet our deadline for printing.**

**NO EXCEPTIONS!**

*Green Mountain-Continued from page 46*

Jim will be sorely missed by all of us who knew him personally, also on the 2 meter and 6 meter bands. One of Jim's sons held an Amateur Radio License and his name is Roger and his call sign is N3JKG. God Bless you Jim.

GMRA is in it's full swing at recruiting new members. Maybe you know a close friend who would like to belong to the repeater group. Bring them along to the next lunch get together and Business meeting Which will be held at Shoney's Restaurant in Laurel. Dues are now payable through the 31st of december. 73's and "Happy Holidays" to all.

Ken Easton, N3HLY



## IBM Amateur Radio Association

- ◆ Meetings: First Tuesday of the month that is a work day, 5:45 p.m. - 7:00 p.m.
- ◆ Next Meeting: Dec. 2, at 5:45 p.m. Building 182, Room 3C5I (The Radio Shack) (301) 240-6877
- ◆ Chat Net: Second Wednesday of each month, 5:00 p.m. 145.520
- ◆ Packet: 145.610 MHz, running TCP/IP netcode (WA3YHE-1)
- ◆ Information: Erinn Tordella-N3HSA (301) 640-4286, The Radio Room-(301) 240-6877

## FIRST ANNUAL CLUB PRESIDENTS SEMINAR

The WMA/IBM Amateur Radio Association (ARA) is pleased to report that we were able to attend the "First Annual Club President's Seminar", hosted by Bill Howard-WB3V, ARRL Maryland Section Manager. The opening ceremonies, including introductions from each of the participants, were videotaped, thus providing each club the opportunity to "preserve the moment" for ARRL archives. Hugh Turnbull-W3ABC (The Atlantic Division Director) opened the seminar by welcoming the participants. The first speaker was Tony Young-WA3YLO, president of the Foundation for Amateur Radio (F.A.R.), Atlantic Division "Ham of the Year", and one of our Club's two F.A.R. representatives (the other is Joe Handley-K3LLL). Tony described the benefits of continued affiliation with F.A.R. and also the requirements for becoming a "Special Service Club." In all, nearly 60 representatives of 27 clubs were present at the seminar, and the general consensus of opinion was that the day-long meeting had resulted in a series of valuable technical interchanges among individuals with diverse interests but common goals within the Amateur Radio community.

## PLANNING NEW FREQUENCY FOR TCP/IP PACKET STATION

Consistent with IBM's tradition of encouraging volunteer service to the local community, the

WMA IBM/ARA is moving forward in its plan to support R.A.C.E.S. and Montgomery County Emergency Planning by switching our packet frequency to that of the R.A.C.E.S. station (WA3YOO) frequency, i.e., 145.75 MHz. To date, we have secured an IP address for the ARA station node, courtesy of Jerry Simon-N3HVC. The plan is to invite all paid-up members to request individual IP addresses through N3HVC directly, who will maintain control as Network Administrator. Currently, the master diskettes for the upgraded TCP/IP netcode reside in the Main Site Radio Room, awaiting hard-copy printout of the documentation (a non-trivial task!). (Many thanks to Chuck-W3GQY and new ham Tom-N3QJD for taking time out to provide the ARA with a copy of the appropriate version of the TCP/IP software and documentation.) Our Club vice-president and newsletter editor, Frank-WA3YHE, is taking the lead on the code migration task, with invaluable backup support from Roel-N3FJJ and Joe-N3KLL--all three of whom are "Subject Matter Experts" (SMEs).

## STATUS OF HF TRANCEIVER REPAIRS

Bill-KX8I, Club Treasurer and HF CW Administrator deserves the lion's share of credit for following through with ICOM on the repairs to the IC-765 which experienced a major "power outage" problem. The last chapter in this saga has yet to be written; we plan to keep you informed; "stay tuned" for next month's update!

'73, Erinn-N3HSA

## HAPPY HOLIDAY'S



From the Staff At  
AUTO-CALL MAGAZINE



## Baltimore Amateur Radio Club

Meeting Schedule: 1st and 3rd Wednesday of each month at 7:30 pm.

Meeting Place: Dulaney High School, 255 Padonia Rd., Timonium, Md., Shop 3 (Electronics)

Repeater Frequencies: W3FT/R 146.07/67, 222.64/224.24, 444.625/449.625

For information call: 410-HAM-TALK (426-8255)

Mailing Address: PO Box 120, Reisterstown, MD 21136

Well, it has been a long time since you have seen BARC here in Autocall. I want to apologize for this, and let you know that I hope to keep you up to date on what's happening every month from here on out.

I will briefly summarize the current year by saying that the membership is strong and growing. The 2 meter repeater system is performing admirably. Our public service participation is at or near an all time high. Plans are well underway for the 1994 Greater Baltimore Hamboree and Computerfest. Fox hunts are being held on a more or less regular basis. License Exams are being given every other month. A Novice/Tech class is well underway at the Essex Community College. Field Day was fun for all. The annual banquet was a big success. And if any club members can think of something I missed, please let me know.

### Now for some details.

First and foremost, I guess, is the upcoming BARC "IT'S FREE" MINIFEST to be held on January 19, 1994. This is our annual January Program and Swapmeet meeting. Again this year, it will be held in the Exhibition Hall of the Maryland State Fairgrounds in Timonium (the same place as the GBH&C). Take exit 17 off I-83 and turn into the Fairgrounds. Gates will open at 5:00 pm. Tables are free. Admission is free. Talk-in on 146.67. The only request we make is please clean up after yourself. Come out and have a great time!

Our VE Team is giving exams on the third Thursday of every even numbered month (February, April, June, August, October and December) at the Towson Presbyterian Church. Registration starts at 7:00pm.

Thanks to our new program committee chairperson Bruce, W3UWV, the December 1st program will be very special. The subject will be: The National Radio Company History and Early Receivers. To present this subject we have one of the recognized leading collectors of National Radio equipment and memorabilia, John Kelly. John and his wife Sasine will both visit us. John lives in Gaithersburg and will bring several examples of early and notable National Company communications receivers with him for us to see in the flesh. National was a leading manufacturer of some outstanding and now historically significant radios. This is the company that spawned the James Millen and the SW-3, a famous combination if ever there was one. (John will bring an SW-3 as well as other National receivers with him). Although John is a ham, N3GVF, his interest is principally that of a collector, but his talk will be slanted toward we who are interested in our heritage as radio operators and users of communications equipment. Plan on this one!

On January 5th, Bruce Packham will present a program on: Matching An Antenna Using A Noise Bridge and Related Topics. He will bring a receiver, noise bridge, and related paraphernalia and will measure some sample transmission line impedances and so on, by way of demonstration. He will offer his experience in matching his 80/40 meter antenna installation which required more than "cut the wire and pull it up" to install. He'll touch upon how some of the gadgets and gillhoolies work, the dreaded "j", and discuss some possible antenna related misconceptions just to liven things up a bit.

For more information on any of these items, or other Amateur Radio related items in the Baltimore/Washington area, please feel free to call our voice mail system. It is available 24 hours a day, 7 days a week.

73, Steve, WA3SOR

**All Articles, Club Column's and Shack Sales  
for publication in Auto-Call Magazine are  
to be sent to:**

**Doug Allen, Editor  
8008 Shadow Oak lane  
Pasadena, MD 21122  
(410) 437-6258**



## **MD/DC MARS Association**

U.S. Navy-Marine Corps  
Military Affiliate Radio System  
Region Two (MD/DC Area)

- ◆ Traffic Net: Every night at 1900 on 3349 MHz USB
- ◆ Information: Roger Gibson - N3ICJ, (410) 374-4106

The November meeting of MD/DC Navy-Marine Corps MARS was held at the U.S. Naval Academy on November 6, 1993. Eighteen of the 61 members were present. Andrew Parker - WV1B, who is stationed at the Naval Academy, and is also the Chief Operator of the MARS station at the academy, made the arrangements.

MD/DC Area Director, Richard Muth - N3GTF, worked us through a full agenda. The status of the MD/DC Area VHF repeater, MARS Data System (MDS) Station, and digipeater were discussed. A better radio and antenna will be installed at the MDS Station in the near future, and additional digipeaters at Annapolis and Cheltenham are being considered. Richard encouraged participation by MD/DC Area MARS Stations in the November ARES/RACES emergency communication exercise. Members interested in MD/DC Area staff positions for 1994 should make their interest known to Richard. Meetings will be held every other month starting next year, with the January meeting tentatively scheduled to be held at Headquarters, Navy-Marine Corps MARS Radio Station, Cheltenham, MD.

One member attending was Dave Vittum - W1DV, who is also the full time Chief, Navy-Marine Corps Mars. Dave provided an update on current headquarters activities, with a rewrite of U.S. Navy-Marine Corps Communications Instructions, NTP 8(B), representing a major effort. He expects to have five operator positions manned full time at Cheltenham for cross-band MARS/amateur operations on Armed Forces Day, May 21, 1994. Dave also mentioned a renewed interest in Slow Scan TV (SSTV).

No visit to the Naval Academy is complete without a demonstration by Bob Bruninga -WB4APR, of his APRS GPS packet system, and we weren't disappointed. Bob mentioned that deployed Navy ships are

now using APRS to identify stateside MARS stations that are available for phone patches.

Navy-Marine Corps MARS is always looking for additional members, particularly in out-of-the-way locations. Talk to Gene Doyle - NU3G, and other MD/DC Area MARS members, at most local area Hamfests. We would also be happy to provide a speaker for a club meeting to discuss Navy-Marine Corps MARS and the opportunities for participation in this most worthwhile activity.

## **Capital City Amateur Radio Society**

- ◆ Meetings: 3rd Saturday of the month at 12 Noon (except July & August). Woodridge Public Library, 18th & Rhode Island Ave. NE, Washington, DC
- ◆ Repeater: 145.11/144.51 Mhz in NE Washington, DC. Auto-patch membership available.
- ◆ Weekly Nets: Computer Net: Monday at 8 PM on the repeater
- ◆ Packet Net: Tuesday at 8 PM on 145.53 MHz
- ◆ On-Air Meeting: Wednesday at 8 PM on the repeater
- ◆ RTTY Net: Thursday at 9 PM on the repeater
- ◆ Information: Chester R. Martin, W3EIL, (202) 529-9598 1719 Franklin St. NE, Washington, DC 20018 Leo J. Boberschmidt, KA3TGY KA3TGY@N3BBF.MD.USA.NA
- ◆ Training: Plater Campbell, N3DZQ, (202) 544 7810

During the October meeting, the following were voted in as members of CCARS:

N3FRT	Bob Haslach
KA3ZDY	Teddy Coleman

Greetings to our new members. Teddy has been a regular check-in on our Wednesday evening net, putting in a great signal from Chaptico, MD. Bob is now our resident DX-peditioner. His job has involved travel to Africa and he has operated from 5V-Togo. He has a license from 5R but was not able to get on the air during his recent trip to Madagascar. Bob, please remember your CCARS friends when you are on your next trip.

During the recent CQWW DX contest, club DX hogs KA3DOF-Sharyn and KA3TGY-Leo were joined by N3KTM-Gus using his upgrade to search

*Continued on next page*



## Northern Virginia FM Association

- ◆ Meetings: 3 times per year (fall, spring, winter)
- ◆ Weekly Nets: NVFMA Net-Every Wed., 8:00pm local, 146.79 - ARES/Public Service Net, Wvwy Sun., 9:00pm local 146.91 - On Air Equip. Clinic, First Wed., 7:30pm local 146.79
- ◆ Repeaters: 2 Mtr-146.79 & 146.91, 6 Mtr - 53.37, 70cm - 444.75, 220Mhz - 224.10, 224.34, 1292.1 Mhz.
- ◆ Membership Info: Norm Rosenthal-KB4VLP (703) 425-7108 or Dan- KC4OCG (703) 281-2358 or Norm- KB4VLP - (703) 912-5891
- ◆ Mailing Address: NVFMA, P.O. Box 486, McLean, VA 22101

Work continues on the Bull Run Remote Receive Sites for 146.79 and 146.91. It is hoped that these remote receivers will be online by the end of 1993.

The Fall Membership Meeting was held on October 28, 1993 at the Fairhill Elementary School in Fairfax, Virginia. The meeting was well attended. Mike Martin spoke on tracking down power line RF interference. His talk was well received and was most enjoyable. If you have any RF interference questions, and you need some experienced, expert help, you may call Mike at (202) 388-2249.

The prototype Weather Alert Interface Box was demonstrated at the meeting. The NWS tone alerts most warnings and some important watches. Upon the weather radio receiver (on 162.55 MHz) at the 146.910- W4XG Tysons Corner repeater site receiving the NWS tone alerted message, it will automatically turn on a ten minute timer. Once a minute for the ten minutes following the NWS tone alert, the repeater will put a message out over the air with a two second audible tone followed by a verbal message "Check for weather alert". An outgoing CTCSS of 131.8 Hz will also be transmitted with the warning message. At the end of ten minutes the timer automatically resets and is ready for another tone alerted message.

Assuming the system works as planned, amateurs with tone squelch radios will be able to use their radios as weather alert radios by setting the

tone squelch to 131.8 Hz. The radio's squelch will only open when the CTCSS tone is sent by the 146.91- repeater. People with scanners, or those listening to the repeater, will hear the audible tone and the verbal warning message.

Please remember that each Wednesday, during fair weather, between 11am and Noon, the NWS tests the tone alert system.

Another feature of the system is the ability to hear one minute of NOAA weather Radio by pressing the DTMF code 1191". The weather radio may be shut off by pressing the \*,11 key, the same key used to bring down the autopatch. The retransmission of NOAA weather radio, on an irregular basis, on the amateur bands, is now permitted under the revised Part 97 rules which became effective in September, 1993.

We hope that this feature will be found useful to the amateur community. The details of operation may change after the system is in use. Please watch this column for further details and changes.

### 1993-1994 DIRECTORY

We are pleased that the 1993-1994 Directories have been completed and are ready for distribution. Those attending the meeting have already received their copies. Directories will be sent out to the remainder of the members in the coming weeks. much thanks to Mark Feit KR4FH for the professional layout of the directory. Thanks to Vienna Independent Printing on Chain Bridge Rd. in Vienna for getting the directories printed.

DAN KC4OCG

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*CCARS - Continued from page 50*

on 10 meter SSB. Careful Gus! Once the DX bug bites you, expect to put a lot of time on the air; just ask Sharyn, Leo, K3UAL-Joe, N3EPH-Cy, or WB3KIC-Shep. Gus is going to have to invent a 40-hour day to get everything done.

December meeting will be on December 18th at the Woodridge Public Library. See you all there.

73, Leo-KA3TGY



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### FOR SALE - Kenwood TR7950 2 Mtr. rig with manual and Mic ..... \$250.

**WANTED** - Bird 43 Slugs 2-30 250W and 1000W  
Contact Tom Marcellino, W3BYM (301) 871-7463

**WANTED** - Original Tech Manuals, in good condition, for the following: H-P 3466A DMM, H-P 606B RF Gen, H-P 302A Wave Analyzer, GR 1304-B BFO. Contact-Gary Alley, 7100 Constantine Ave., Springfield, VA 221540  
(703) 569-8964

**FOR SALE** - Misc QST's 1916, 1917, 1919, 1920, 1927, 1934 Thru 1939, 1964, 1970. Solid Run 1930 Thru 1949. CQ June & Nov. 1945, Jan & Feb 1947. ARRL Hand books 1970 & 1977. Call Bob, W4JNN (703) 560-7161

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22304-1827 (703) 370-1880

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### WANTED BY HAM PLATE COLLECTOR:

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**WANTED:** Usable print heads for a NEC Pinwriter, P2200 Printer, or a defunct NEC P2200 Printer with a useable printhead. State price please - only truly interested contributors need to respond. Jack Weaver, 1440 Kent Circle, Winchester, VA 22601, (703) 662-0587

**FOR SALE:** Two (2) Collins 30L-1 Amplifiers, Wing & Round Emblem. Amplifiers rebuilt with New Tubes, Filters and Diodes. Complete with Cables and Manuals. Either amplifier ..... \$550.  
Harry Kaklikian, W4ACN, 4941 Andrea Ave, Annandale, VA 22003, (703) 978-4402

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**FOR SALE:** Hygain Vertical Ant. .... \$80.  
**WANTED:** 20 HY choke to handel approx. 400 ma @ 5 kv Call eves. (301) 567-2012



**FOR SALE:** W2DU-HF current balun, 1.8-30 MHz., rated 3 kw. in box, never used (Pick-up) ..... \$15.  
**WANTED:** QST, Februsry 1957; QST, August 1979; ARRL Handbook, 1957; following late '50's "orange & black" ARRL publications: "ARRL License Manual," "How to Become a Radio Amateur" and "Learning the Radiotelegraph Code".

**WANTED:** Vibroplex "Blue Racer" in very good condition. Prefer a later model (1942-62), identified by modern logo on name plate, 833 Broadway address, the word "patented" but no patent numbers listed. However, an older (pre-WWII) model in excellent operating & cosmetic condition will be considered. If writing, please state price in your first letter. If not sure of the instrument's age, describe the name plate in detail and I can approximately date it.

Paul H. Bock, Jr. - K4MSG, RR1, box 347, Hamilton, VA 22068, (w) (703) 560-5000 x2062, (h) (703) 882-4745

**FOR SALE:** MFJ-9030 30 Meter, 5 watt CW Transceiver with MFJ-726 filter and MFJ-4114 Power Pack (Batteries Not Included) Purchased New in Feb. 1993, Used 3 Months ..... \$220.  
 Approx. 38 feet unused Beldon 9913 Coax Cable ..... \$15.  
 Ted Cohen, N4XX (703) 780-6397 Daily

**FOR SALE:** Yaesu FT-103R HT w/ctcss, tonepad, wall charger, origional & gain ducks, original box and manuals, Plus FBA-5 Drycell Pack ..... \$165.  
 Yaesu AD-3 100w 2m/440 mobile duplexer ..... \$35.  
 Yaesu YS-60, 1.8-60 MHz SWR/2kw wattmeter ..... \$80.  
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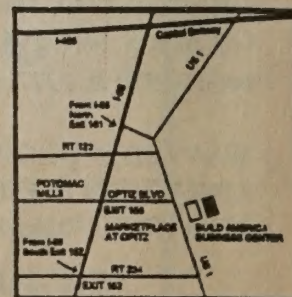
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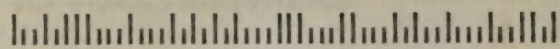
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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>FAR MEETING DEC. 8th, 1993</b>			<b>1</b>	<b>2</b> Anne Arundel Voice of America	<b>3</b> MD. Mobileers Shenandoah	<b>4</b> Green Mtn. Stafford
<b>5</b>	<b>6</b> Adams County Dept of State	<b>7</b> Antietam IBM PG Wireless	<b>8</b> **FAR** Pentagon S. Patuxent	<b>9</b> AMRAD MADRAS Mt. Vernon N. Virginia ▼	<b>10</b> Alexandria SMARC Vienna	<b>11</b> Stafford SWOP/QCWA Luncheon
<b>12</b> Metrocomm	<b>13</b> Carroll Cnty PVRC	<b>14</b> Fauquier Frederick Leisure Wld Woodbridge	<b>15</b> BARC Goddard MARC QCWA 137	<b>16</b> Anne Arundel QCWA 20	<b>17</b> Rock Creek Shenandoah	<b>18</b> Capitol City Stafford
<b>19</b>	<b>20</b> Culpeper Ole VA Hams Sterling Park	<b>21</b> Antietam Arlington BRATS	<b>22</b> Laurel	<b>23</b> MADRAS St. Mary's	<b>24</b> Central MD Vienna	<b>25</b> Stafford
<b>26</b>	<b>27</b>	<b>28</b> Columbia	<b>29</b> QCWA 20	<b>30</b>	<b>31</b>	

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